NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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SIMON BROWN, Editor.

SUGGESTED BY THE RETURN OF MAY.

"In yonder vault of liquid blue,
A blander light is kindling now;
Sweet morn once more distils her dew,
O'er wood, and vale, and mountain brow.
Man looks abroad upon the earth,
With hopeful eye and trusting heart.
The promised seed-time now hath come,
And chilling winds depart."

AT this season, development is the phenomenon that meets us at every turn during this glorious month. In what does this mysterious principle of growth—this silent apportionment of parts—which we behold in the vegetable world, consist?

With the retreat of winter, all the long pent and dormant forces of nature break forth afresh; verdure robes the hill and the valley, and every leaf and spire of grass respond to the vivifying influences of the sun and air. From the dawn of creation, it has been constantly and vigorously at work—never reposing—never flagging—ever the study and wonder of the learned, whether developing its results in the upheaving of islands in the sea, or in arranging and perfecting the minute mechanism of the leaf or flower; and yet it is as much a mystery, and, in its essence, as far beyond the range of his investigations, as it was when Adam walked with his beautiful Eve amid opening flowers in the primal Eden!

"Almost every particle of the world visible to us," says an elegant writer, "has been, at some time, within the organized body of some plant or animal. It has felt the vitalizing influence of this mysterious principle of life, and been separated by it, perhaps, unto its ultimate atoms. We gather a handful of the black vegetable mould at our feet. It is now inert, but how many changes have passed upon it in the last six thousand years! Had we the power of evoking from it the history of these changes, it would make one of the most instructive volumes ever written. The most of it is from the decay of plants, the carbon of which once floated in the air as gas, carried in every direction by the winds, until taken up by the leaves of plants. How many voyages round the world have been completed by these particles? A portion of it is made up of animals. Here are minute particles of mica, feldspar and quartz, too small for the eye to distinguish—traces of soda, potash, chlorine, alkalies and acids only detected by the most delicate chemical tests. What rocks did they once enter into; what animal forms have they been incorporated with, and whence have they been borne, in the earth's changes, to their present resting places? Once, possibly, this particle dwelt in a granite boulder, and was borne from the remote North, in the ice period, and deposited in its present neighborhood."

These changes, each and all, have an intimate relation to the phenomena and operations of the farm; and this principle of life and vital action, as developed in every leaf, in every bud, and every living form,—whether animal or vegetable,—should be made the study of the mind,—not, perhaps, to study the mystery of its origin or of its more recondite laws, but to ready and familiar appreciation of whatever most directly acts upon unorganized matter in the production, support and perfection of living forms.

Well may the student of nature, impressed with the magnificence and mystery of his subject, inquire—

"Are not the mountain waves and skies, a part
Of me, and of my soul, as I of them?
Is not the love of them deep in my heart
With a pure passion? Should I not contemn
All objects, if compared with these, and stem
A tide of suffering, rather than forego
Such feelings for the hard and worldly phlegm
Of those whose eyes are turned below,
Gazing upon the ground, with thoughts that dare not glow?"

It is at this delightful season that we come into closest contact with this principle. The farmer, as he walks his fields, sees its operations in all the varied form of beauty and utility which surround him; in the rock hidden in the soil; in the slender stalk and the tapering spire; in the verdant leaf and the iris-colored flower, as well as in the insect, whose tiny form and iridescent wings glance in tremulous beauty in the golden sunbeam—an insignificant atom in itself, but a link, nevertheless, in the great chain of which even man himself, with all his boasted intelligence and godlike powers of acting and reflecting, is but a perishable part!

Although we can necessarily know little of life, as a principle, we may yet know something of its laws, and the conditions of its development. In it all the hopes of the husbandman are involved and wrapped up. "Without it, his fields are barren, and all his costly acres unproductive property. With it, he has more than the fabled power of Midas, whose touch turned everything into gold. On every acre he may open a mine quite as productive as the plains of the Pacific shore. How few of these have yielded a hundred dollars to the acre; yet this is no uncommon feat of husbandry in the least favored of our States. The dreams of poets and philosophers are more than realized in modern agriculture."

No employment bequeaths such placid and tranquil memories, filling the heart with quiet gladness, and suffusing the spirit with a holy atmosphere in which no corroding anguish—no distrusting bitterness or regret can exist. All its images retain through life, a pleasant and grateful hue; they are blended with no deep sorrow, no dark remorse, no haunting shame, and are linked with those associations, which, if touched by a sentiment, are never blighted by a passion.

TIME FOR HEIFERS TO COME IN.—An English writer considers it a matter of importance that heifers should be so managed as to have their first calf late in the spring, when there is an abundance of succulent food, inducing a large supply of milk. This is much better than to have them come in early in spring when they have dry food only. The habit at first formed is apt to remain with them, and if they commence by giving a good supply of milk, they will be more likely to be good milkers afterwards.—*N. H. Jour. of Agriculture.*

CHILD LIFE AMONG THE BECHUANAS.

Until the child begins to change its teeth it lays from morning till evening, and has nothing to do but to grow as fast as possible. We have noticed among these little idlers many of the games of our childhood; for instance, two little girls will seat themselves side by side in a very mysterious manner; one of them picks up a stone, and passing it rapidly from one hand to the other, presents her two fists to her companion, that she may guess in which hand the pebble is. If the guesser is mistaken, the other exclaims triumphantly, "*Ua ya incha, kia ya khomo*" (You eat the dog, I eat the beef;) in the opposite case she declares herself to be vanquished by saying "*Kia ya incha, ua ya khomo*" (I eat the dog, you eat the beef;) and she delivers the stone to her friend.

Playing with bones, which they call *keta*, jumping, and at the same time passing a long cord under the feet, are favorite sports of the African children. Afterward come racing, wrestling and sham fights.

These latter exercises are more especially practiced in the fields, where it is the duty of every little boy of eight years old to drive daily the sheep and goats of his father. These young shepherds contrive to pass their time as agreeably as possible. In spite of the orders continually given them to disperse themselves, so that the flocks may find abundant pasturage, they invariably end by getting together. There is always a chief of the band among them, who presides at the games, and prevents quarrelling. When they are tired of running about, they sit down in the shadow of a rock, or upon the banks of a stream, and amuse themselves by making oxen of clay, or weaving garlands of flowers, with which they adorn their heads. The girls of the same age do not enjoy so much liberty. They go to the fields with their mothers, and while the latter dig up the ground, they pick up sticks, and make the faggot which will serve to cook the evening meal. Sometimes they are left at home to take care of a younger brother.—*Rev. E. Casalis.*

THE RAILROADS OF MASSACHUSETTS.—From the abstract of the returns of the several railroad corporations in Massachusetts for the year ending Nov. 30th, 1862, prepared at the State House, we learn that the total capital stock of the steam railroads is $59,487,752, with a capital paid in of $49,287,517, and a debt of $18,411,221. The cost of these railroads and their equipments was $66,793,574; their length 1608 miles. The trains of these roads have run 6,561,854 miles during the year, carrying 12,020,315 passengers and 3,877,717 tons of freight. The total income was $9,933, 586; total expense of working $5,448,-231, leaving a net income of $3,581,657; total amount of dividends $2,397, 949; number of fatal casualties 72; not fatal 15.

The horse railroads of Massachusetts are twenty-two in number, with a paid in capital of $2,-582, 150, and a debt of $790,546.. The cost of the various railroads has been $2,443,587, and of equipment, $820,447. Their length is 87 miles. Number of passengers carried, 14,854,885; total income, $874,349; expenses, $663,152. Net income, $200,345, of which amount $147,023 was divided among stockholders. Three fatal accidents have occurred, and 12 persons were injured.

For the New England Farmer.

KICKING COWS.

MR. EDITOR:—I have seen some remarks relative to kicking cows, in the *Farmer* and several other papers, and the various methods adopted by different individuals for breaking them of this pernicious trick, all of which I have tried, only one of them resulting in any benefit—which is this: "When the cow kicks, with the right hand hold fast to the teat, slapping her smartly with the left." But this method is not to be relied on only in ordinary cases, although I have seen several cured in this way. In two or three it has had no effect, as was the case with a cow of my own. The method I have adopted is this: When the cow kicks, catch the foot in the hand and draw it close to the cow's body, holding it there until she settles back on you, then let go of it. After several vain attempts at kicking, the cow finding herself caught in her own trap, is very careful how she takes up her foot while milking, and much more how she puts it down.

This method I adopted with a cow of my own, and it resulted effectually; and several of my neighbors have since tried it with like results. You must bear in mind that we tried every way with which we were acquainted without any effect. Thinking that some of the readers of the *Farmer* might be interested as I have been in this matter, I have at last concluded to forward my experience in relation to the matter to the columns of the *Farmer*, it being a paper I have taken for more than six years. ELERY.

Strafford, Vt., 1863.

For the New England Farmer.

RETROSPECTIVE NOTES.

"DRY FOOD FOR HOGS"—SUCCESS IN PORK-MAKING.—*Page* 10.—In this brief, but suggestive item from the *Country Gentleman*, we have a statement of some of the hurtful consequences of a rather too common error in the feeding of hogs. The error alluded to consists, not in feeding dry food, as the caption of the article might lead one to suppose, but in an exactly opposite practice, namely, that of giving hogs their food in a too liquid or over-diluted condition. Some turn all their dish-washings and other similar slops into their swill-barrel, and neglecting to thicken it sufficiently with meal, bran, boiled potatoes or other solid material, their hogs get, during the early part of their life, a too watery substance, the swill being little better than a little milk and a few cold potatoes from the table with a little meal or bran, perhaps, too much diluted with dish-washings and such like watery and innutritious fluids. Among the pernicious consequences flowing from this cruel and heedless practice of forcing hogs to swallow an immense quantity of thin, watery swill, in order to get the small quantity of really nourishing matter which is intermixed with it, are the following: The hogs do not grow and gain in flesh, as all well fed and well managed pigs do, all the time, from their entrance upon to their exit from the stage; they become stunted and comparatively poor, so much so that no amount of corn or other fattening food, in subsequent months, will ever make them as large or as healthy as they might otherwise have been; their digestive organs seem to become disordered as subsequent better feeding appears to do them, often, but little good; and they become big-bellied, ill-proportioned, and unseemly creatures, compared with those which have less watery and more nutritious food during the period of growth.

If any of our readers fail to make their spring pigs weigh from two hundred and fifty to three hundred pounds at the age of nine months, or from two hundred and seventy-five to three hundred pounds at ten months, or a little over, it may be suspected that there is an error somewhere in their mode of feeding, or of managing otherwise. It may be in their failure to select a good breed, but much more frequently, we presume, the error may be found in the mode or materials employed in feeding, and, in many cases, we are quite confident, in the very practice upon which we have been commenting. Those who fail to raise hogs to be of the weights above named, at the ages mentioned, may feel assured that there is an error somewhere in their modes of management in pork-making,—an error which brings with it, as a penalty, the loss of a good many pounds of pork, which might have been obtained by a better mode of management. And if any such should be willing to be at a little pains to find out where their error is, or by what method they may hereafter succeed better, or secure better luck, we think they would be abundantly repaid for the time and pains taken, if they would refer to, read and consider well all the articles upon swine and pork-making which are contained in volume 13th of this journal, which is the volume issued during 1861. On pages 10 and 113 of that volume they will find an exposure of the error of feeding with too bulky or too much diluted food; on page 11, a condemnation of the practice of keeping hogs in filthy pens; on page 69 a statement of the proper amount to which hog-feed should be diluted; on page 114, a reference to the decided success of Mr. L. Long, of Holyoke, who feeds meal in the dry state, and slops or other drink separately; on page 348, "A Model Pork-Maker's Mode of Management," with the result, namely, his making his pigs, at ten months old, dress over 400 lbs.; and on page 355, a similar success by the editor. These and other items may be found in the volume referred to.

"VEGETABLE GROWTH."—*Page* 14.—Who can read this article without having emotions of reverence, gratitude and wonder awakened by the brief glimpses which it gives of the wisdom and goodness of the Infinite Architect, and of the marvellous processes by which He clothes the earth with beauty, and makes it bring forth abundance, both for man and beast! If any one has read this article without having some such emotions stirred up within him, we fear he has read it too hurriedly, or too superficially. He might get different impressions from it, if he should turn to it and read again.

The writer asks, "Would it not be interesting to all who labor to assist the corn to grow, to study the mysteries of vegetable growth? Would we not like to know the elements of which the seed is composed, what chemical changes take place in it during germination, how the plant draws nourishment from the earth," how the liquid sap is converted into solid substance, how the stalk selects one kind of substance from the sap, the seed another kind, and so on, and how all these selected atoms are arranged so as to enlarge stem,

leaf, flower, seed, and every other part of this one of the many millions of plants in which God is working wonders every day? In reply to these questions, may we not venture to speak in the name of hundreds of readers, and say that we would like to know ever more and more about these and all the other wonderful workings of Him who does so much for unappreciative and ungrateful children. We would like if the writer of the article under notice would spread out before farmers and their families some information as to the growth of our common Indian corn, and let them see and feel that God is doing a far greater amount of work in preparing for the desired harvest of golden grain than the most skilful or most industrious of those whose highest honor is to be "co-workers" with Him! And if he should find time to tell us these things which, in reply to his question, we say we would like to know, we would humbly suggest that if he would put the information into the form of a lecture or lesson to a class of young persons, he might contribute somewhat towards giving the farmers of New England an idea of what their sons might be learning at school if studying the applications of botany and chemistry to the elucidation of the facts and phenomona of agriculture. MORE ANON.

For the New England Farmer.

PROFITS OF FOWLS.

MR. EDITOR:—I herewith send you the yearly account of my flock of Brahma fowls. Having spoken before of the merits and superiority of this breed of fowls over all others, it would be but a repetition of the same story again to describe them, I will only say that my opinion is still unchanged; that they surpass in laying qualities, and for the market, any breed of fowls I have ever seen.

In preparing the following statement, I have kept the *market prices*, although 85 dozen of the eggs were sold for setting, last spring, at $1 per dozen, and many were used for the same purpose by myself. I have, therefore, averaged them at 25 cents per dozen, to show the profit these fowls will return to the farmers, at common market prices. It will be noticed that I had but few eggs in April, as many of the hens were setting at that time. I commenced March 1, 1862, with 30 pullets and 2 roosters, keeping a careful account of expenses and income, which stands as follows:

EXPENSE OF KEEPING 32 FOWLS.

1862.		
March, meal, corn, carrots and meat	$3,79	
April, " " " "	3,46	
May, " " " "	3,02	
June, " " " "	4,22	
July, " " " "	3,00	
To Aug. 8, at which time they were sold	70	$19,00

EXPENSE OF REARING 101 CHICKENS.

1862.		
May, potatoes, cracked corn, and scraps	$1,12	
June, cracked corn and scraps	2,50	
July, " " "	3,30	
Aug., " " "	3,40	
Sept., corn, meal and scraps	3,35	
Oct., " " "	3,20	
Nov., " " " and carrots	3,00	
Dec., " " " " "	3,20	
1863.		
Jan., corn, meal and scraps, carrots	2,98	
Feb., " " " "	2,85	
March, " " " "	2,24	$31,24
		$50,33

The variation in keeping the young fowls is occasioned by disposing of them through the summer, as will be seen by the statement. From November to the 1st of March I have had 30 pullets on hand.

INCOME FROM FOWLS.

1862.		
March	488 eggs	
April	199 "	
May	480 "	
June	496 "	
July	300 "	
To Aug. 8	108 "	
Net	2,161 eggs, or 180 1-12 dozen, at 25 cts	$45,02
Aug. 8,	30 fowls sold at $1 each	30,00
Aug.	12 young roosters to butcher, 40 cts	4,80
Sept.,	22 pullets and 8 roosters, $1	30,00
Sept.,	2 dozen eggs sold	50
Oct.,	17 fowls, $1	17,00
Oct.,	8 dozen eggs, 25 cts	2,00
Nov.,	36 dozen eggs, 25 cts	9,00
Nov.,	12 fowls, 75 cts	9,00
Dec.,	35¼ dozen eggs, 25 cts	8,81
1863.		
Jan.,	44 dozen eggs, 25 cts	11,00
Feb.,	42¾ dozen eggs, 25 cts	10,69
Mar.,	46¾ dozen eggs, 25 cts	11,69
Net income from fowls		$189,51
Expense of keeping, &c		50,33
Net profit		$139,18

Salem, March, 1863. JOHN S. IVES.

For the New England Farmer.

HOW TO BE FITTED FOR THE PURSUITS OF LIFE.

MR. EDITOR:—Being a constant reader of the *Farmer*, within the last few months I have observed several articles advocating the necessity of making some work on agriculture a text-book in our common schools. The idea has been advanced that too little attention is given to the instruction of youth in our rural districts in the science of agriculture; while great care is given to instruct the pupil in what are termed the learned professions, but very little attention is given to fit the young to follow with success that profession which is the foundation of all others. The reader would infer that in our common schools are taught the sciences of medicine, law and theology; while the lad who is destined to follow the plough must go untaught and uncared for.

It cannot be denied that common schools and those of a higher grade have each their own appropriate work, and while both are faithful in training the mind, their labor is the same in kind, though not in degree. It is equally true that while the scholars have their round of duties assigned, the days of active business which follow are not without their work for such individuals to perform. When the little boy first finds his way to the district school, it is hard to determine whether he is to be a farmer, mechanic or philosopher. But we do know there is a casket that contains a priceless gem; unpolished it may be, but susceptible of the highest finish, and its value will be proportioned to the perfectness of the artist's work.

It is conceded that all boys should learn to read. All should learn arithmetic, grammar, history and geography, and should obtain some knowledge of the natural sciences. And if circumstances permit, some knowledge of the higher mathematics would be valuable. We have already sufficient work for the schooldays allotted to American youth, without making direct preparation for any particular profession. Through all these years the faculties of the mind have been developing, and the individual has been gaining that discipline which will fit him to become a useful citizen

and a successful business man. He has now arrived at that time of life, when, if ever, he is capable to decide for himself what calling he shall pursue. His mind has become sufficiently mature to enter upon the work of life with an earnest endeavor to excel in whatever he undertakes. If he is to be a farmer, now is the time for him to learn both the theory and practice of his profession. If he wishes to be a physician, he must apply or see his theory when learned put to practical test, in order to be successful. So it is with whatever pursuit to which he may turn his attention. Some require more scientific research than others; but to become successful in any, the studies of early schooldays should be pursued by all.

Every mind should be properly disciplined, and needs a certain amount of general culture to fit the individual to work in any of the departments of human industry. Hence, the conclusion that our common schools have now assigned all the work they can well do in the time allowed them. Let them teach the children those elementary principles which lie at the foundation of all right mental discipline. Let them do thoroughly their allotted tasks—not forgetting to mould the plastic mind, committed to their care, so that the young man as he goes forth from them may be an intellectual, moral, law-abiding citizen, ready for every good work. E.

Middlebury, Vt., Feb., 1863.

PRUNING GOOSEBERRY TREES.

The gooseberry, though a useful and early fruit, is very generally neglected, no other attention being paid to it, than to prune the tree at random, once a year. The crop of fine fruit is also often injured by having the largest and earliest berries previously gathered for tarts, while green. To prevent this, a sufficient number of trees of the earliest varieties should be planted in a separate part of the garden, and devoted exclusively for use when required for tarts.

Both these and the other trees which are intended to bear ripe fruit, *should be pruned twice in the year;* in the autumn as soon as the shoots have ripened their wood, leaving at least six inches distance between every branch, and shortening the small branches to two or three eyes. Again, the trees should be examined about the middle or end of June, and all improper suckers, and very luxuriant shoots, such as the French call *gourmands*, cut out; both these operations should be done with a sharp pruning knife.—*London Horticultural Transactions.*

YARN FROM MILKWEED.—Mr. Marsh Heathcott, a cotton manufacturer of Patterson, N. J., has succeeded in spinning yarn from the fibres of milkweed. The yarn is favorably spoken of; though how it may be adapted to withstanding moisture, or receiving dyes, we have not heard. Mr. H. estimates that an acre of land might yield $120 worth per annum of this product.

PATENT OFFICE BUSINESS.—The annual report of the Commissioner of Patents shows that $153,818 were received for patents, re-issues, &c., and $11,081 for copies and recording. The expenses were $182,800. The cost for clerk hire was upwards of $122,000, of which $44,462 were for temporary clerks.

FARMERS' WIVES OVERTAXED.

There is scarcely any lot in life, in this country, which promises so much quiet enjoyment, such uniform health and uninterrupted prosperity, as that of a gentleman farmer's wife; of a man who has a well-improved, well-stocked plantation, all paid for, with no indebtedness, and a sufficient surplus of money always at command, to meet emergencies, and to take advantage of those circumstances of times, and seasons, and changing conditions which are constantly presenting themselves. Such a woman is incomparably more certain of living in quiet comfort to a good old age than the wife of a merchant prince, or one of the money-kings of Wall Street; who, although they may clear thousands in a day, do, nevertheless, in multitudes of cases, die in poverty, leaving their wives and daughters to the sad heritage of being slighted and forgotten by those who once were made happy by their smiles; and to pine away in tears and destitution. On the other hand, it is often a sad lot indeed to be the wife of a farmer who begins married life by renting a piece of land or buying a "place" on credit, with the moth of "interest" feeding on the sweat of his face every moment of his existence.

The affectionate and steady interest, the laudable pride, and the self-denying devotion which wives have for the comfort, prosperity, and respectability of their husbands and children, is a proverb and a wonder in all civilized lands. There is an abnegation of self in this direction, as constant as the flow of time; so loving, so uncomplaining, so heroic, that if angels make note of mortal things, they may well look down in smiling admiration. But it is a melancholy and undeniable fact, that in millions of cases, that which challenges angelic admiration fails to be recognized or appreciated by the very men who are the incessant objects of these high, heroic virtues. In plain language, in the civilization of the latter half of the nineteenth century, a farmer's wife, as a too general rule, is a slave and a drudge; not of necessity, by design, but for want of that consideration, the very absence of which, in reference to the wife of a man's youth, is a crime. It is perhaps safe to say, that, on three farms out of four, the wife works harder, endures more, than any other on the place; more than the husband, more than the "farm-hand," more than the "hired help" of the kitchen. Many a farmer speaks to his wife, habitually, in terms so imperious, so impatient, so petulant, that if repeated to the scullion of the kitchen, would be met with an indignant and speedy departure, or if to the man-help, would be answered with a stroke from the shoulder, which would send the churl reeling a rod away!

In another way a farmer inadvertently increases the hardships of his wife; that is, by speaking to her or treating her disrespectfully in the presence of the servants or children. The man is naturally the ruling spirit of the household, and if he fails to show to his wife, on all occasions, that tenderness, affection and respect which is her just due, it is instantly noted on the part of menials, and children too, and they very easily glide into the same vice, and interpret it as an encouragement to slight her authority, to undervalue her judgment and to lower that high standard of respect, which of right belongs to her. And as the wife has the servants and children always about her,

and is under the necessity of giving hourly instructions, the want of fidelity and promptness to these is sufficient to derange the whole household and utterly thwart that regularity and system, without which there is no domestic enjoyment and but little thrift on the farm.

The indisputable truth is, that there is no other item of superior, or perhaps equal importance, in the happy and profitable management of any farm, great or small, than that every person on it should be made to understand that deference, and respect, and prompt and faithful obedience, should be paid, under all circumstances, to the wife, the mother and the mistress; the larger the farm, the greater interests there are at stake. If poor, then the less ability is there to run the risk of losses which are certain to occur in the failure of proper obedience. An illustration: A tardy meal infallibly ruffles the temper of the workmen, and too often of the husband; yet all the wife's orders were given in time; but the boy has lagged in bringing wood, or the cook failed to put her loaf to bake in season, because they did not fear the mistress, and the master was known not to be very particular to enforce his wife's authority. If by these causes a dinner is thrown back half an hour, it means on a good-sized farm a loss of time equivalent to the work of one hand a whole day; it means the very considerable difference between working pleasantly and grumblingly the remainder of the day; it means in harvest time, in showery weather, the loss of loads of hay or grain.

Time, and money, and health, and even life itself, are not unfrequently lost by a want of promptitude on the part of the farmer in making repairs about the house, in procuring needed things in time, and failing to have those little conveniences which, although their cost is even contemptible, are in a measure practically invaluable. I was in a farmer's house one night; the wife and two daughters were plying their needles industriously by the light of a candle, the wick of which was frequently clipped off by a pair of scissors. I asked the husband why he did not buy a candle-snuffer. "O, the scissors are good enough." And yet he owned six hundred acres of fine grazing lands, and every inch paid for. I once called on an old friend, a man of education and of a family, loved and honored all over his native State. The buildings were of brick, in the centre of an inherited farm of several hundred acres. The house was supplied with the purest, coldest and best water from a well in the yard; facilities for obtaining which were a rope, one end of which was tied to a post, the other to an old tin pan, literally. The discomfort and unnecessary labor involved in these two cases may be estimated at leisure.

I know it to be the case, and have seen it on many Western farms, when firewood was wanted, a tree was cut down and hauled bodily to the door of the kitchen; and when it was all gone, another was drawn up to supply its place; giving the cook and the wife green wood with which to kindle and keep up their fires.

There are thousands of farms in this country, where the spring which supplies all the water for drink and cooking, is from a quarter to more than half a mile distant from the house, and a "pailful" is brought at a time, involving five or ten miles' walking in a day, for months and years together; when a man in half a day could make a slide and with a fifty cent barrel could in half an hour deliver, at the door, enough to last the whole day. How many weeks of painful and expensive sickness; how many lives have been lost of wives, and daughters, and cooks, by being caught in a shower between the house and the spring, while in a state of perspiration or weakness, from working over the fire, cannot be known; but that they number thousands, will not be intelligently denied.

Many a time, a pane of glass has been broken out, or a shingle has been blown from the roof, and the repair has not been made for weeks or many months together; and for want of it have come agonizing neuralgias; or a child has waked up in the night with the croup, to get well only with a doctor's bill, which would have paid twenty times for the repair; even if a first-born has not died, to agonize a mother's heart to the latest hour of life; or the leak in the roof has remained, requiring the placing of a bucket or the washing of the floor at every rain; or the "spare bed" has been wetted and forgotten; some visitor, or kind neighbor, or dear friend has been placed in it, to wake up to a fatal fever, as was the case with the great Lord Bacon.—*Hall's Journal of Health.*

THE OLD FARM HOUSE.

At the foot of the hill, near the old red mill.
In a quiet, shady spot,
Just peeping through, half hid from view,
Stands a little moss-grown cot;
And straying through at the open door,
The sunbeams play on the sanded floor.

The easy chair, all patched with care,
Is placed by the old hearth stone;
With witching grace, in the old fire-place,
The evergreens are strewn,
And pictures hang on the whitened wall
And the old clock ticks in the cottage hall.

More lovely still, on the window sill,
The dew-eyed flowers rest,
While midst the leaves, on the moss-grown eaves,
The martin builds her nest.
And all day long the summer breeze
Is whispering love to the bending trees.

Over the door, all covered o'er
With a sack of dark green baize,
Lays a musket old, whose worth is told
In the events of other days;
And the powder flask, and the hunter's horn,
Have hung beside it for many a morn.

For years have fled, with a noiseless tread,
Like fairy dreams away,
And left in their flight, all shorn of his might,
A father—old and gray;
And the soft wind plays with his snow-white hair
As the old man sleeps in his easy chair.

In at the door, on the sanded floor,
Light, fairy footsteps glide,
And a maiden fair, with flaxen hair,
Kneels by the old man's side—
An old oak wrecked by the angry storm,
While the ivy clings to its trembling form.

BEAVERS NEAR SACRAMENTO.—A colony of beavers, the *Bee* says, have commenced work on the banks of American River, at Smith's Garden. They have cut down a row of trees, each one of which is made to fall with its top in the river. Some of the stumps are six inches in diameter, cut a foot and a half from the ground. They seem to prefer the cottonwood. A dozen were seen on a moonlight night, sporting and working.

WHEN doctrines mischievous in themselves are recommended by the good life of their author, it is like the arming of a depraved woman with beauty.

NEW BOOKS.

GRAPE CULTURE, WINES AND WINE-MAKING. With Notes upon Agriculture and Horticulture. By A. Haraszthy. New York; Harper & Brothers, Publishers. 1 Vol., 8vo., 420 pp. Price $5 00.

The author of this work was appointed by the Governor of California, under a legislative act, to report the "ways and means best adapted to promote the improvement and culture of the grape vine in California." He accordingly visited various parts of France, the Netherlands, Holland, Rhenish Prussia, Bavaria, Nassau, Baden, Switzerland, Spain, Italy and England. After traversing these countries with a scrutinizing eye and an inquiring mind, the author came to the conclusion that California is superior in all the conditions of soil, climate and other natural advantages, to the most favored wine-producing districts of Europe, and that it actually has yielded considerably more per acre. He is satisfied, he says, that even if the separate advantages of these countries could be combined in one, it would still be surpassed by California, when its now dormant resources shall be developed; that it can produce as noble and generous wine as any in Europe; more in quantity to the acre, and without repeated failures through frosts, summer rains, hailstorms, or other causes.

It is his opinion, also, that no country can surpass California in raising the sugar beet, Sorgho and Imphee, and that no part of the world, except, perhaps, Africa, can produce the same quantity of these commodities to the acre.

The work seems to contain everything necessary to teach one to produce grapes and make wine successfully. It is printed on fine paper, large type, and abundantly illustrated with engravings. It has a short paper on the Culture of the Silk Worm, one on the Manufacture of Potato-Starch, one on Grape Sugar, one on Beet Sugar, and one on Sorgho and Imphee.

COMPLETE MANUAL ON THE CULTIVATION OF TOBACCO. New York; C. M. Saxton, Publisher. 1 Vol., 16mo. Price 25 cts.

This is one of our old friend Saxton's handbooks, and the only one with pernicious tendencies we have ever known him to publish. Although it is in his usual good style, our hope is that no one will read it or practice its teachings. For sale by A. Williams & Co., 100 Washington Street, Boston.

For the New England Farmer.

FEEDING MEAL TO STOCK.

Doubtless many of your readers have had longer experience in feeding meal, and perhaps know as economical and effectual a manner of feeding it, as the subscriber. I believe there are a few, at least, of your patrons, like many farmers whom I know, who feed from four to eight quarts of meal a day to one beef creature, till they feed from seven to ten cwt. of meal to one beef, and who never slaughter an ordinary sized beef that yields upwards of forty pounds of rough tallow.

These farmers feed their meal dry. This is a great waste. My practice in fattening beef and swine, as well as feeding cows for milk, has been to pour boiling water on as much meal as would not make the animal's bowels move too freely, at night and in the morning; when the mush is cool, give it to the cow or pig.

In covering the meal with boiling water in this way, the starch of the grain is dissolved, and the latent nutritive properties extracted, and the animal receives the entire nutriment of the grain.

I calculate stock do not, in eating dry meal, receive more than one-half of the goodness of the meal. There is not action enough in mastication, or heat sufficient in the stomach of the animal, to extract and receive the *entire* and *real* sweetness of the grain.

Had I roots, I should feed them to my fattening beef. But not having any, I feed only meal and hay, and I have fatted two ordinary sized cows, two years past, and to which I fed only three cwt. of meal each, and they each yielded upwards of forty pounds rough tallow. Once a week, I throw into the mush a little salt, and occasionally a table spoonful of wood ashes.

My experience teaches me that one cwt. of meal fed as described above, is equal to two cwt. fed dry. Try it, young farmer, and see if you can indorse this. QUI NUNC.

East Granville, Feb. 17, 1863.

For the New England Farmer.

FIDELITY OF A DOG.

MR. BROWN:—When Col. G. L. Prescott, of the Massachusetts 32d Regiment was at home a few weeks since, I was among a crowd of eager listeners to hear his thrilling story of the battle of Fredericksburg. Among other incidents he mentioned a dog that attracted much attention. The ground was covered with men, either lying to escape the enemy's fire, or fallen to rise no more. This dog continually ran in and out among them, searching for his master, or entreating somebody to follow him.

The following, from the *Inquirer*, probably refers to the same faithful animal. I have no doubt a later visitor will find him keeping watch and ward over the soldier's grave. W. D. B.

Concord, Mass., March, 1863.

As Hon. John Covode, in company with a number of officers, was passing over the battle-field beyond Fredericksburg, after the battle, their attention was called to a small dog lying by a corpse. Mr. Covode halted a few minutes to see if life was extinct. Raising the coat from the man's face, he found him dead. The dog, looking wistfully up, ran to the dead man's face and kissed his silent lips. Such devotion in a small dog was so singular, that Mr. Covode examined some papers upon the body, and found it to be that of Sergeant W. H. Brown, Co. C, 91st Pennsylvania. The dog was shivering in the cold, but refused to leave his master's body; and as the coat was thrown over his face again, he seemed very uneasy, and tried to get under it to the man's face. He had, it seems, followed the regiment into battle, and stuck to his master, and when he fell, remained with him, refusing to leave him or to eat anything. As the party returned, an ambulance was carrying the corpse to a little grove of trees

for interment, and the little dog following, the only mourner at that funeral, as the hero's comrades had been called to some other point.

For the New England Farmer.

THE WICKED TYPE-SETTERS.

MR. EDITOR:—Is it not at least as bad to make other people tell a fib as to tell it right out squarely one's self? If it is, the modern type-setters have much to answer for—even yours are not without fault. And perhaps this habit of theirs may show the appropriateness of the customary application to the youngest apprentice, of the name of the "devil," who is "the father of lies." For instance, in the last number of the *Farmer*, J. S. Ives is made to say that he dug from a lot measuring three-fourths of a square rod, 14½ bushels of sweet potatoes. This would be more than 18 bushels to the square rod, and 2880 bushels, or over 86 tons (at 60 pounds to the bushel,) per acre. Of course Mr. Ives never could have written such a—*story*. In the South, 400 or 500 bushels to the acre "is often raised;" in Ohio, from 100 to 150 bushels is the "usual" crop. In this section, probably not so much as that can be relied on. Please caution your type-setters so that we, who want to depend on what the papers tell us, may not be misled into new schemes by extravagant stories.

Again, in the Transactions of the Middlesex Agricultural Society for 1862, I perceive that other type-setters have made the respected Chairman of the committee on "Milch Cows—Blood Stock," say, in comparing two cows, that "the value of the milk of Mr. Wheeler's cow, at 3 cents a quart, for thirty days, would exceed that of Mr. Barrett's by $25,20." The difference is said to have been 4 quarts a day; and this, by my arithmetic, at 3 cents a quart, for 30 days, comes a good deal short of $25,20. Indeed, the whole milk, given by the best of the cows named, would not, at that price, come to near that sum. Now, friend Lawson never could have made such a mistake; it must be the fault of the wicked printers, who seem bound to tell big stories.

Hoping for a reformation among the printers, I remain Yours for the truth,

JONATHAN DOOLITTLE.

Elm Lodge, Feb. 16, 1863.

REMARKS.—Neither of the "errors" which our correspondent so facetiously describes, are attributable to the "wicked type-setters." On reference to Mr. Ives' letter we find that it was printed "according to copy."

By the following note, received since the above was in type, our correspondent will perceive where and what was the mistake he refers to:

CORRECTION.—In the communication from me on the culture of the sweet potato, I find that the printers or myself have made a slight, but very important mistake. The land measured 1¾ rods, instead of ¾ of a rod, as printed.

Salem, March, 1863. JOHN S. IVES.

RASPBERRIES.—The Albany *Country Gentleman* advertises 500,000 *Doolittle* Raspberries for sale. We think, from the name, that we must have had some of this kind in our own garden.

For the New England Farmer.

OUR NORTHERN FARMERS.

The present state of the country deeply involves the interest of the New England Farmer. The broken circle of many of our homes, by an unjust and outrageous war, and the broken hearts that bleed at the fireside for many of our noble sons, slain in battle, not only tell a tale of woe, but a loss of *labor*, that will tell in almost every farm home in New England.

The great corn and wheat States, are decimated in a like ratio. Their bone and muscle, their vigorous young men, too, are in hospitals, in camp, or slain, or in the battle field manfully striving and fighting for the salvation of our common country. Here, too, is an immense loss of labor, and the grand question arises, how are we to make up these deficiencies? The grain growing slave States of Texas, Arkansas, Kentucky, Missouri, North Carolina, Tennessee and Virginia, must be reduced to straits which they so justly deserve. Their able-bodied white men are in the war. Their slaves will be laggard, sullen and lazy in the field. Their crops must come short.

The foregoing hints would seem to form a ground work, and teach a lesson to all who till the soil in the New England State, that *products* of *prime necessity* must be lessened to an alarming extent by this immense loss of labor, not forgetting that millions are consumers, but not producers! This terrible lesson of war that we are learning, will not be confined to the high prices of sugar, wool, cotton and woolen cloth, tea and coffee—but beef, pork, flour, corn and labor are sure to take the upward march in the scale of prices. We shall hear no more of burning ears of corn for fuel, or wheat rotting in the stack in consequence of low prices in the West.

Wherever the *New England Farmer* circulates, let it propound questions to its readers—ask the father how many boys are left to till the farm? Laborers will be scarce, the old men and boys must do the work, and, if need be, the generous hand of female labor would be volunteered in some instances, with honor to the sex. In Scotland, last April, I saw some 15 to 20 rollicking young girls spreading manure and planting seed. (A queer sight for a New England eye.) I thought it a praiseworthy occupation in that country, one which is universal in the old world. So in our own great West, females perform a large amount of farm labor. *Dire necessity* would only lead me to advocate the doctrine of female labor in the field.

The next question is, the breadth of land, the manure, the crops—how much can be worked comfortably? His manure heap is large as usual, he must plough a less number of acres, perhaps two in place of four; time is gained in plowing and must be applied in hauling out the manure, and the happy result will be, larger crops will be gathered from half the number of acres, which applies to every crop; his land is put in "good heart," and, to his surprise, he has been compelled to learn the first best lesson of his life. Instead of ploughing, hoeing, digging and spreading manure over four or five acres, he has realized the same product from two acres. Mr. Editor, can you endorse this statement?

The coming season beckons to the slothful farmer with more than usual meaning. His gates may be off the hinges, bars down, the old hat with-

out a head supply the place of a broken pane; flour and corn were cheap last year—pork and beef cheap too—his manure heap at the end of the barn lies in the road through the year; but the day of reckoning may come to this slothful man sooner than may meet his convenience.

These are war times—a southern, civil war, that has taken the Government by the throat, and threatens the northern people with the virus fangs of the copperhead. Our farms and workshops must be worked. Let seed-time find no laggards in the field. Let the warm upland be *first* manured and put into wheat, all you can spare; let the other small grains follow, and when you get to the month of August, let the winter wheat be sown liberally, and, from spring and winter, you will have wheat to sell!

Mr. Editor, I feel that I am intruding upon your diminished columns, (yet it was a war necessity,) with all their former good, in a compressed form; I feel that an idle hour may not have been misspent with your farm-readers.

The great majority of our soldiers are farmers; the immense products of their labor will be sensibly felt and diminished; neither war, nor the world, can go on without them. Hence, every appliance in its most compact, concentrated form, promises a good result by the abundance of manure on hand, which, if well spread and ploughed in deep, seldom injures the soil or dwarfs the crop. P.

Brooklyn, L. I., March, 1863.

For the New England Farmer.

TREES FOR SHADE, ORNAMENT AND PROFIT.

Mr. Editor :—My thoughts have been turned to this subject by an article which appeared in the *Farmer* not long since, on the "Cultivation of Nuts," by O. V. Hills, of this town. It seems to me some of his suggestions are well worthy the consideration of farmers, especially those which relate to cultivating walnut and chestnut trees, which are natural or indigenous to many parts of New England, and are not only profitable for the nuts they produce, but their form or shape is generally such as to make them suitable for shade and ornament, and when they have ceased to answer these purposes, they are still valuable for the timber and fuel which they afford. If a portion of the trees on Boston Common produced nuts, the "city squirrels" there, and at least some of the children of the poor, might enjoy them without expense, and young men from the country would be reminded of the pleasant days, when with the girls they went nutting,

The meat of the butternut it seems to me is too oily to be healthy; it requires pretty hard blows to break the shell, and there is always more or less danger of cracking the fingers instead of the nuts. The tree is not very valuable even for fuel, and would hardly be considered ornamental.

The elm is a graceful, noble tree, but it bears nothing while growing, nor will anything else, (except perhaps grass,) grow within the range of its roots, and when the time comes to cut it down, 'tis no light labor to prepare the trunk for the saw-mill, and the branches for the stove. It was somewhat different in the days of old-fashioned fire-places which swallowed limbs and even logs, from six to eight feet long, and soon digested them.

The buttonwood or sycamore is not as graceful as the elm, nor so good for timber, and Sambo might well say, when attempting to split a specimen, the grain of which was uncommonly winding, that he thought it would be a pretty tough match for the lighting.

The oak has justly been styled the king of the forest, but does not appear to be so highly prized for shade and ornament as his prime minister, the rock maple, whose well-proportioned stately form,

> "Arrayed in summer robes of richest green,
> Or autumn decked, when rainbow tints are seen,"

is peculiarly adapted to these purposes. Nor is this all, for after attaining sufficient size, it yields an annual supply of sap, which can be converted into the sweetest of sugars, and also furnishes some of the best material for furniture and the fire.

Not much can be said in favor of the various poplars, especially the old Lombardy, now nearly extinct in this part of the country, but which in their day and generation looked like long lines of tall grenadiers, and were about as well calculated for shade and ornament as so many liberty poles.

I will not take the time and space to speak of the spruce and some other trees which might be mentioned, as I wish to make a few inquiries.

Mr. Hills, in his communication, says that chestnuts vary in size, some being very large and others quite small. The same may be said respecting walnuts, and while some ripen early and fall readily, (frost or no frost,) others do not mature until some weeks later, and even then cling to the tree tenaciously. There is also a difference in the color and taste or flavor of the meat and the ease with which it can be removed from the shell when cracked. In fact, some are worth twice as much as others, at least to keep, if not for the market.

Now I wish to inquire if nuts can be grafted, or budded, and thus improved and made more profitable by raising only the best, as in the case of fruits? Can they be propagated in any manner except by planting the seed? Would the quality be improved, as well as the quantity increased, by manure and cultivation? I have about a hundred walnut trees, varying in size from an inch in diameter to more than a foot, and from five years old to at least an hundred. Between forty and fifty are within a few feet of the wall upon the north side of my farm, but some of the others have sprung up, as it were spontaneously, in places where I do not wish to have them remain; but it is very difficult to remove this kind of tree successfully, even when rather small, on account of the depth to which the main or tap root descends. What would be the effect to remove the earth from one side, down some distance, sever the tap root, replace the soil and allow the tree to remain a year or two, and then remove it; would it not be more likely to live, than if transplanted immediately? Has any one made the experiment? An answer to any of the above questions will much oblige your correspondent. A. C. W.

Leominster, March, 1863.

☞ Late advices from Alexandria state that the crop of cotton in Egypt promises to be most abundant this year. There will be not less than 180,000 bales for export, the quantity last year having been only 105,000.

EXTRACTS AND REPLIES.

BORING FOR MAPLE SAP.

A one-fourth inch bit, to bore sugar trees, is better than any larger size, as you will get just as much sap, and the tree will sooner overcome the injury, than though a larger bit were used. The spout should be of tin, three-fourths of an inch in diameter, and three inches long, beveled at one end, and be driven round the hole, after the outside bark has been removed.

Warwick, March, 1863. GEO. A. CUSHING.

PREPARATION OF SOIL FOR AN ORCHARD—MUCK—WHAT TREES TO PLANT—RECLAIMING AN OLD ORCHARD—DIVERSITY OF OPINIONS—BARNS—ROOTS FOR SHEEP—VERMIN ON CATTLE.

1. Will you oblige a reader of the *Farmer* with information how to prepare the soil for an orchard?

2. The land pitches to the south-east, bounded by a wood lot on the north, and south by a row of maple trees, on the roadside, running east and west. How near would you plant to the wood and the row of maples?

3. Could I use muck that was carted in the barn-yard last fall, after partly filling with the earth that is dug out? The ground is in grass, in pretty good condition.

4. What will be the best, dwarf or standard trees, and what kinds will be the most hardy for the town of Whitingham, Vt.?

5. Would you recommend planting an old orchard, or what would you do with it? Some of the trees appear to be quite sound, but do not bear well.

6. Would you favor spreading on grass land muck that was dug out last fall and put in the barn-yard?

7. I am about to build a barn, thirty by forty feet; will it be a good plan to have the barn floor on the south side next the barn-yard and a shed attached to cover the manure, so that the cattle will be under the driveway? There will be about three feet fall from the stable to the shed floor; the shed forty by ten feet, with lifting doors in the barn to clean out the droppings.

8. What kind of roots is best for sheep in winter?

I am very much interested in reading the *Farmer*, and find a great deal of information, but am surprised to see so much difference of opinion in the last agricultural meeting. One advocated the use of sand, another muck, for an absorbent. I presume you can reconcile these differences. One may have a sandy soil, the other a heavy clay, and both may be right.

I have found oil and snuff a sure cure for vermin on cattle, but believe good care is best. Will bone dust pay on corn, at one and one-half to two cents per pound? H. D.

Shelburne Falls, March, 1863.

REMARKS.—1. Plow and thoroughly pulverize the land, and manure it so that it would bring fifty bushels of corn per acre.

2. Not nearer than forty or fifty feet.

3. The muck will be excellent, mixed with the soil thrown from the holes made to receive the trees.

4. You must have trees adapted to your locality. Select such as you know produce good fruit and as will bear the climate.

5. Plow, manure and plant the old orchard with corn, and tend it well. Prune the trees in June, and scatter half a peck, or a peck, of wood ashes about each tree, if you can get it, and the old orchard will be quite likely to spring into new life.

6. Certainly—it would be an excellent plan. The finer you make it the better it will be.

7. We see no objection to the arrangement you speak of for the barn.

8. Any roots will be good, but mangolds are the cheapest to raise. They are a variety of the beet.

Our correspondent is surprised at the difference of opinion expressed by the speakers at the agricultural meetings at the State House,—but comes to correct conclusions, we think, as to the cause of such difference. If we all thought alike, there would be little need of this paper, or the discussions at the State House. We do not wonder at his surprise, however, when gentlemen rise there and gravely assert that sand is as good an absorbent of liquids as dry muck. If such persons will fill one barrel with dry sand, and another with dry muck, and pour water upon them, they will probably find that two or three buckets of water will run from the sand before one bucketful will pass from the muck.

Sand, as we understand it, is so much coarser than the particles of dry muck, that the spaces between the grains of sand are larger, so that water passes away from it more readily. The coarser the sand, the more readily the water passes out. The ammonia in rain water undoubtedly decomposes a portion of the sand and makes it soluble—but that does not affect the question of absorption.

On the other hand, dry muck is so very fine, that some portion of it would be quite likely to pass away with the water in leaching, and the water itself slightly discolored. It would be quite as reasonable, we think, to say that sand is as good as dry muck. These crude opinions are probably formed from using sand under cattle, or in the barn cellar, and finding it so much better than nothing, the opinion is formed that it is *better than anything else*. It is not safe to adopt theories from single experiments.

BLACK TUSK IN SWINE.

In the *Farmer* of Feb. 14th is a piece from "N. Q T., King Oak Hill," headed "Pigs—Disease." By his description of the disease I should call it the black tusk, and if he or any one has sick pigs, by examining in the mouth, they will find the tusks black. If not too far gone, they can be saved by pulling them out, or cutting them off. The best thing I ever used is a pair of cut nippers for the purpose. The disease is contagious; if it is in a litter of pigs all are sure to have it. I have known whole litters to have the disease, and have saved them by this treatment. I have one now that was so bad that he could get up with difficulty, but is getting better. The disease is not uncommon with us, but since we have treated them in this way we have not lost many. I think there is no need of losing them if one takes them in season.

South Deerfield, March, 1863. E. C. P.

TO KILL VERMIN ON ANIMALS.

In regard to an inquiry in the *Farmer* as to the means of destroying lice on animals, I know of nothing so effectual as melted lard, rubbed well in. It is effectual on dogs and fowls. On other animals I have not tried it, but am told by those who have, that it is effectual. I. C. R.

COE'S SUPERPHOSPHATE OF LIME.

I should like to ask a few questions about the use of Coe's superphosphate of lime on a light, sandy loam.

1. Is it profitable for top-dressing on grass lands? If so, how is it used, and how much per acre?

2. Is it profitable for corn, grain, potatoes, &c.? If so, how is it used? and will it improve the crops for more than one year? J. E. MORSE.

Peterboro', N. H., March, 1863.

REMARKS.—There is no doubt with us that good superphosphate of lime is an excellent fertilizer. Whether you can use it *profitably* as a top-dressing, or on grain crops, depends so much upon circumstances, that any opinion from us would be of little value.

Its use will certainly increase the amount of crop, and its effects will be felt more than one year—but whether they will pay the cost of the article and leave a margin of profit, is more than we can tell. You must purchase a small quantity, use it judiciously,

and solve the question of profit for yourself. From two to four hundred pounds is commonly used per acre, on the crops you mention. We believe *Coe's superphosphate is a pure article, and is really an active fertilizer.*

USE OF POUDRETTE.

Will you, or some of the readers of the *Farmer*, who have used the poudrette of the Lodi Company, inform us through that paper whether it will increase the crop to which it is applied so much that farmers can afford to purchase and apply it to corn, or other crops? If the reports they publish are true, I think our farmers should look to their own resources in this respect more carefully than they are apt to; for my experience proves that a large pile of the very best manure for corn may be made yearly by adding dry muck, or loam, to the deposits in the vault of the privy, and at the same time it will prevent any disagreeable odor from arising. W. J. SIMONDS.

Roxbury, Vt., March, 1863.

REMARKS.—Like most specific fertilizers poudrette may be used profitably in certain cases, but not as a general thing in producing a corn crop. Your idea of the muck, clay, &c., is the true one to be spread among the farmers.

SHEEP EATING WOOL.

A correspondent of your paper states that some of the sheep in his neighborhood are in the habit of eating the wool off other sheep. The habit is analogous to that of hens eating their own egg shells, and can be cured by about the same remedy, viz., mix a small quantity of bone dust with meal, and feed the sheep upon it occasionally. If bone dust cannot be readily had, use slacked lime, dried and powdered.

March, 17, 1863. WOOL.

For the New England Farmer.

OBSERVATIONS AND REMARKS.

CURE FOR COLDS—CUTS—SHEEP FEVER—INDEPENDENT FARMERS.

MR. EDITOR:—The man who lives near the seashore need not have a cold in the head, if he will duck it in the cold sea water as it floats to the shore.

If you notice the caulker, you will find that those troublesome cracks on the hand, or cuts, are covered with oakum.

The sheep fever is a malady that attacks many farmers. Look out and not have the wool pulled over your eyes, brother farmers, for perhaps the advice of the clam-digger to his son, "never to go clamming at high water," may be applicable to your case.

Plant no more than can be well manured, is not heeded by many of those who raise small crops.

I have yet to see that class of people that live and enjoy more of this life's comforts than the independent farmer. Perhaps at times his son may enjoy the *otter* cap, which is put on the *fop's* head to hide his lack of brains, or the fine coat with which, perhaps, to carry out the old adage, which says, "Fine feathers make fine birds;" but those may deceive at a distance, while a near approach reveals the deficiency. Heed not the fine array of silks that sweep the streets, for many of them are purchased at the price of virtue.

I find that the orchardist who places his bins in a cool, dry atmosphere has fruit to sell in the spring.

"More Anon," in his "Retrospective Notes," criticises my writings on the use of muck, &c., doubting the correctness of the views therein stated. I live to learn. Glad was I to see the pen of a farmer who differs, point out the way to do it. I think him honest in his views, but if he will look at a field in which the muck is from five to fifteen feet in depth, well drained, I think he will find that it is not the field to raise large hay crops on.

Those farmers who run to the mechanic to repair and to do all the patching up jobs whilst they loaf around, hardly ever are burdened with money. S. P. M.

Cape Elizabeth, Me., Jan., 1863.

PURE FLOUR OF BONE.—Attention is called to an advertisement of this new article in another column. We have had no experience with it, and can only judge of its value from a knowledge of the efficiency of bone in the coarse forms in which we have heretofore used it. The bone now offered is *boiled* and ground into a perfect flour. The proprietors say,—

"The 'rot' will not appear in potatoes manured with bone flour.

"It prevents the *smut* in rye and other grain.

"It cures and prevents the 'yellows' in peach trees, when freely used.

"It will prevent the splitting and rusting of pears," &c.

Like all other specific fertilizers, this must be tested with care, in a small way at first, in order to learn whether it can be used with profit.

"FARMERS' WIVES OVERTAXED."—The reader is invited to peruse, carefully, the article upon another page of this number, on the subject, "*Farmers' Wives Overtaxed.*" We do not know how we can possibly so well employ our space as to give three or four short articles upon this topic from the pen of Dr. W. W. HALL, of New York, the editor of *Hall's Journal of Health*. From long and close observation, and from an extended intercourse with the families of a large number of farmers, we know that the Doctor has not exaggerated in the statements he has made, sharp and glowing as they are. Many times, in sorrow and deep sympathy for the sufferers, have we alluded to this matter, in numerous public addresses before the farmers of New England. The evil is one of great magnitude, and is multiplying its candidates for an early grave with fearful rapidity. Thanks, many thanks to the philanthropic Doctor, for this timely and judicious effort to rescue from a lingering death thousands of our energetic and lovely women.

THE BEST LABEL for fruit trees, shrubs, &c., is a strip of tin about eight inches long and an inch wide, tapering to a point at one end. Paint this with white lead and mark the name with an awl, scratching it through the paint. Bend the pointed end around a small limb of the tree, which expands to its growth. So says the *Annual Register*, and so adds the *Germantown Telegraph*.

FERMENTING MANURES.

In our last club discussion, it being the third upon the subject of "manure and its application," one member recommended keeping manure for a year or more, if necessary, or until it was *thoroughly decomposed*, chiefly for the purpose of destroying foul seeds, claiming that if there were no such seeds sown by means of the manure, or with the grain sown, or by the wind or birds, or allowed to go to seed with hoed crops—that, eventually, our farms would be free from foul weeds. It was objected by some that the end could *never be accomplished* on the ground that foul weeds were a part of "the curse" upon fallen man; that the seeds were *in the earth*, made and purposely put there by God, and consequently it would ever be in vain for man to strive to eradicate them.

One member remarked that a friend told him that he had *positive proof* that kale seed would live in the earth and germinate after twenty years.

Now, Messrs. Editors, how is it—will seeds germinate after having lain in a manure heap a year, while it is fermenting and becoming *thoroughly decomposed?*

The question,—whether manure can be sufficiently heated to destroy the vitality of seeds, without greatly injuring the manure itself,—is a very interesting and important one. It is one upon which we have experimented considerably without being able, as yet, to come to any well-settled conclusions as to that particular point. It needs to be conducted with great care, in order to be of value. The seeds, of various kinds, should be added to the manure, so that the experimenter shall know that they are there, and then the whole process conducted with the nicest accuracy in regard to the temperature of the heap, weather, &c. We have entertained the opinion that the compost heap may be fermented to such a degree as will destroy the vitality of seeds, without injuring the compost, but feel satisfied that it can only be done by exercising the greatest care during the process of fermentation.

Some members affirmed that they were always troubled more by weeds from *old* manure than from *fresh!*

Is it generally considered that it is bad policy, on the score of *manurial value*, to retain manure until well decomposed? Some of our club members think there is a necessary loss of a large proportion of fertilizing matter when the manure decomposes out of the earth; others think that the manure increases in net value more than 6 per cent., by being decomposed in the yard, and the practice of "R. B.," one of the most successful farmers in T., was cited in point.

If we could do just as we please with the droppings of our stock, we would have them spread upon the ground and slightly covered, as often as an ox-cart full had accumulated. In that condition, nothing whatever, we think, would be lost. Not only all the fertilizing qualities would be saved, but the fermentative process carried on in the manure would have a beneficial *mechanical* effect upon the soil. The finest crops we have ever produced, have been obtained under this treatment,—all the liquids being retained among the solids, and spread and ploughed under three or four inches in the autumn. In the following spring, the ground was almost as mellow as an ash heap and unusually black. The crop that grew upon it surpassed any other that have grown upon the farm. But to the question:—Manure will not ferment in a cold place. Whenever it becomes warm, and is moist, then fermentation begins, and this may be carried on until the manure becomes tender and may be finely divided by overhauling, so as to be convenient to use, or it may be carried on until its fertilizing qualities are nearly exhausted.

When fermentation takes place, ammonia is set free, and there is some loss if the heap lies open, and especially when it is disturbed in being overhauled. That loss, however, cannot be important. "The more complete the state of fermentation, *if not carried too far*, the more immediate will be the agency of the manure."

In his "Elements," Johnson says that "it has been found that one ton of dry food and straw gives a quantity of farm-yard dung which weighs,

When recent	46 to 50 cwt.
After 6 weeks	40 to 44 "
After 8 weeks	38 to 40 "
When half rotten	30 to 35 "
When fully rotten	20 to 25 "

A part of this loss may, no doubt, be ascribed to the evaporation of a portion of the water of the recent dung; but the larger part is due to an *actual escape of the substance of the manure itself.* The farmer, therefore, who applies the manure from a given weight of food and straw, in a fresh state, adds more to his land than if he first allows it to become perfectly fermented. Were he to chop his straw and put it in as it comes fresh from the field, he would add still more; but its action as a manure would be slower, and while it would beneficially open stiff and heavy soils, it would injure others by making them too light and porous."

Will several cords of manure in one pile become thoroughly decomposed in one season without forking over? And can it be forked over without a loss of ammonia?

What we have said sufficiently answers this.

How many inches of earth, or muck, covered over such a pile, would be a perfect prevention from loss during decomposition?

One or two inches of a clay, or even a sandy loam, would be sufficient.

Some farmers cover up, in the centre of such a pile, a quantity of unslacked lime, to hasten fermentation. Is it advisable to do so?

We do not believe it would be advisable, under any ordinary circumstances.

I am told that an agricultural school teacher, who has some one-half dozen evening schools in

operation in this vicinity, says that "fire-fang," or the burning of manure, is no injury? Is it so?

Randolph, Vt., March, 1863. QUERYMAN.

It will be seen, by what we have already said, that *fermentation*, if carried too far, may be almost as destructive to a compost heap as *conflagration* itself, and we have quoted one of the highest authorities of the age to sustain us. Is there a farmer among us, of any sort of observation, who has not at some time, seen a portion of a manure heap nearly ruined by being too highly fermented?

Our practice is, to throw the manure of every kind, coarse and fine, into a compact heap, beating the coarse lumps to pieces and laying it up as lightly as possible. When this is done, we thrust smooth sticks as large as a hoe-handle, and twice as long, into the pile, four or five feet apart. In three or four days, these are drawn up, one after another, and the temperature of the pile ascertained by grasping the stick in the hand. Each stick should be kept in its place, as they will indicate different degrees of heat. Now, by examining the heap where each stick was drawn, the true degree of heat will soon be learned, which is necessary to induce the amount of fermentation desired. There is no danger of loss in this process, where close attention is paid to the heap while the process is going on. It is a good plan, not to wait for a high degree of heat, but when the pile is fairly warmed through—which can always be ascertained by the sticks—throw it over with a six-tined dung fork, and lay it up lightly as before. In this manner, if there be warm showers, any amount of coarse manure may be made fine in the course of twelve to fifteen days.

SAVE THE BONES.

In another column, we publish the advertisement of HENRY A. BREED & Co., of Boston, who are manufacturing and selling a flour which closely resembles soiled or damaged flour of wheat and rye mingled, but which consists wholly of the ground bones of cattle reduced to fine flour by a powerful mill constructed for that purpose.

It is pretty well known that bone and dried flesh are the *basis* or "stock" of nearly all our *artificial* fertilizers, which are more or less valuable as "poudrettes" and "manures," just in proportion to the quantity of bones and dried flesh that has been worked into them or used in their chemical preparation. The raw bone, after boiling, we need hardly say, contains all that is required by nature for a first-class manure, namely, phosphorus and nitrogen combined with lime and other elements in just the right proportions to furnish the food of plants. Bone and dried flesh may be said to bear the same relation to plants and fruits, as meat and bread to the body of man.

England is the largest consumer and buyer of bone, at present, and we are told that much of the bone saved in the United States is exported to Great Britain. This is an injury and waste which ought not to be allowed. When we send away our bone, we send away and sell for a small price the essential and productive body of the soil. If we value our own and our children's prosperity, we shall take care that all the bone made upon the soil of Massachusetts shall be constantly restored to that soil, when it is no longer serviceable as a part of the living animal.

The Flour of Bone sold by our advertisers is warranted pure bone, with salt enough to keep it sweet, it being only five to ten per cent. From the known character of the advertisers we deem them entitled to perfect confidence.

NEW BOOKS.

THE FIELD AND GARDEN VEGETABLES OF AMERICA; containing full Descriptions of nearly Eleven Hundred Species and Varieties; with Directions for Propagating, Culture and Use. By Fearing Burr, Jr. Illustrated. Boston: Crosby & Nichols. 1 vol., 8vo., 674 pp. Price $2 50.

To those who have not access to other books of a like character, this will prove a useful and acceptable work. It is well printed, and the illustrations, from the pencil of Mr. Isaac Sprague, of Cambridge, are very beautifully drawn, and engraved with considerable skill.

The information contained in the book seems to be designed for popular use, and such a work, in the hands of every farmer and gardener, would be useful,—but the large, open pages, large type, fine paper and expensive binding, make it too costly, and will greatly limit its circulation. Indeed, but comparatively few who need the information it contains, will be able to avail themselves of its benefits. A large portion of its contents may already be found in a much cheaper form.

AMERICAN POMOLOGICAL SOCIETY. Proceedings of the Ninth Session of the Society, held in Boston, Sept. 17, 18 and 19, 1862. Published by the Society.

This is a beautifully printed book of 227 pages, with a full index, showing the financial condition of the Society, the names of its members, and its transactions for the year 1862. The first important paper is the Address of the President, Hon. MARSHALL P. WILDER, and the next the Catalogue presented by a committee, specially designated to revise it. We have spoken of both of these papers in high terms, heretofore. Most of the remaining portion of the work is devoted to the discussions which took place at the annual meeting, and which we spoke of at the time. There is a paper on *Orchard Culture* in the West, one on the *Strawberry Family*, and some State Reports. The work reflects great credit on its animated and harmonious members.

GRUMBLING is all very well in its place. It is the deep bass that is needed to make up the full harmony of being.

For the New England Farmer.

WOOL GROWING.

It is a fault of New England that she runs oftener to extremes than other countries possessing less enterprise and genius, and with less moral force. This is more clearly felt now than at any other period. New England has been the nursery of American enterprise and prosperity. She has educated the farmers, the mechanics, the merchants and professional men for the whole country, and in the future will feel the great draft of the whole country upon her energies, now that those energies are so diffused throughout a land so prolific as the West, where her sons and daughters have settled and built up rival institutions of agriculture, commerce and art. When New England owned the commerce of the country, and the manufactures were held in the hollow of her hands, and the West and South borrowed almost all their commercial and mechanical aid from her resources, she could control by her superior genius not only her own but the destiny of nearly the whole country. Not so, now; and as her natural resources are so inferior to the West, she must foster what she has with a more steady care than in the past. She must be less fickle and more devoted to the solid and steady elements of prosperity always within her reach. Extremes should not meet with such rapidity as in some of her products and labors. There has been no time since the settlement of the New England States, when they could not have raised their own wool, and thus have saved untold wealth now distributed in the South to sow seeds of rebellion, and spent upon the plains of India and Australia to fatten the growth of foreign, though decaying nationalities,—to make the rich richer, and the poor poorer. This is not the only evil to New England. She has not only fed other nations from her hard-earned store, but by this importing system, for the supply of her raw material for manufactures, she has raised up a class of commercial men who are non-producers, who eat up the substance of the producers. This latter system has bred another still worse, and which at the present moment is doing more to impoverish the North than any other one thing —that is the commission system of selling goods. This is purely a New England institution, so far as its introduction and nurture is concerned. At the present moment that system is absorbing more of the real profits of the laborer and mechanic at the card, the spinning-wheel and the loom, than that made from the whole process and capital of the manufacturer. It has built up an artificial credit system, which will ultimately prove ruinous to those who practice it.

A most extravagant set of young men are being raised up, who learn nothing of wool raising or manufacturing, but who hold the business in their hands as a matter of trade, and who keep the manufacturer down to a sense of miserable expectancy and nervous irritability all the time. All this grows out of the non-production of our raw material, and an overstrained and artificial method of selling the goods manufactured, simply because we do not produce our raw material, which is purely within our own hands, and then trust it to the hands of merchandise brokers to sell instead of doing it ourselves, as the English and other nations do. Thus by extremes we lose our substance, and encourage an artificial state of existence, which, above all other nations in the world, we can least afford to do. We neglect wool, flax, hemp, corn, wheat and maple sugar, all of which would prove profitable to the farmer as well as every other branch of New England industry and finance, and spend our time and strength on experiments of an hundred and fifty varieties of pears, and disquisitions on the root crop and sorghum, with an occasional essay on manures, which brings up a conflict at once between Berkshire and Essex,—the same principle being claimed for both locations, whether the soil and climate of the respective places are harmonious or not, or at all fitted for the crops proposed.

These points are particularly familiar to the writer, from an attendance, (almost a silent one,) for four years of the agricultural meetings at the State House. A few plain, practical discussions of a subject will often produce much good to the farmer, but *woe to the pioneer*, that happens to be a little out of the fashion of the times, and ventures to suggest subjects that are staid and well tried, but which do not carry the enthusiasm of change upon them. It has been said that innovation is not always improvement, and it is pre-eminently true in regard to the changes in the agriculture of New England. No crop so valuable as wool, in many senses; none so easily raised, at least in the interior of the State, and yet how much and how long it has been neglected. Even a discussion of this subject a few years since, was received with coldness, and when the subject of the culture of flax was brought up, in 1851, and again in 1859 it was fairly scouted at. How is it now? Why, nearly every old buck that can claim a lineage the other side of the water is marked up to a fabulous price, while flax is to be the product of every farm, yea hot-house in the country. Extremes again! Wool is wanted; let it be raised on the common-sense principle. Blood is much, breeding more, care is more still, and of this we can bestow in plenty. The pastoral! Is there anything more beautiful to contemplate in agriculture than this?

"While shepherds watch their flocks by night!"

How beautiful! All sacred history reveres the interest and beauty of the shepherd's life, and proves in this, as well as the thousand other sacred principles, that simplicity and naturalness is the true foster father of happiness as well as prosperity. Take care of the sheep! They will feed and clothe you. The pastoral care of modern day is beautifully set forth in Spanish literature, from which we learn more of the true theory of sheep-raising than from any other nation, while the quality of wool has ever been of the first order. The king of Spain, as early as the middle of the fourteenth century, placed himself at the head of sheep-raising. A tribunal called the "Mesta," for the regulation of sheep-growing was formed by the chief owners of migratory flocks, the king being the merino mayor. This class of wool, once so celebrated, is obtained from the migratory sheep of Spain. It has been said that the number of these sheep in Spain amounts to ten millions, which twice a year are led a journey of four hundred miles; the right was claimed for them of grazing all the open and common lanes laying in the way, as also a path ninety yards in width through all the enclosed and cultivated country, and other travellers were prohibited passing when

the sheep were in motion. Ten thousand sheep constituted a flock, over which there were placed one principal and fifty subordinate shepherds and as many dogs. The principal passes ahead, and directs the speed and length of the journey, the others following and flanking the flock, collecting the stragglers, &c. Some of the sheep are perfectly trained to obey the signals of the shepherds, (says Tomlinson,) which follow the leading shepherd—for there is no driving—and the rest quietly follow them. "The flocks travel through the cultivated country at the rate of eighteen or twenty miles a day, but in open country, with good pasture more leisurely. The sheep know as well as the shepherds, when the procession has arrived at the end of the journey." "In April their migratory instinct renders them restless, and if not guided they set forth unattended to the cooler hills." "It is during this journey that the sheep are shorn." They are placed in large pens, where they are confined until they perspire freely, which has a tendency to soften the "yolk," and thus the fleece becomes softer and is the more easily cut. At the end of the journey, when the sheep arrive at their summer pasture, they are salted, and with increased appetites move about in search of grass, upon which they fatten. "They are never fed until the dew is dry, nor allowed to drink after hail storms." "In September, the flocks are daubed with a red earth, which is said to conduce to the fineness of the wool." They return from their pasture in October, "when their yeaning time approaches." "Forty or fifty thousand shepherds are said to be employed in tending these sheep. They are a singular race of men, almost as simple as their sheep."

It may be asked by the theoretician and critic, whether sheep emigration is necessary or applicable to New England. The answer is apparent. We have not the uncultivated plains, neither the terraced mountains to feed upon; therefore, large flocks and numerous shepherds are not needed. But we have hills, and meadows, and boys in abundance, and a flock of sheep should be under the care of some one, be he man or boy, who can discriminate between the proper times and conditions of feed in the meadow or hillside, and when to emigrate from the one to the other, and how to train the sheep.

It is by analogy that we learn; therefore, the history of the past, in sheep as well as in man, may be of service to us, if we use our reason and draw conclusions therefrom which are applicable to our condition instead of the condition of the ancients. A careful and persevering policy in the growth of sheep, and a cultivated observation with regard to its influence upon the character of the wool, would, in a few years, bring the New England farmer up to the highest standard of sheep and wool growing, while a changeful and vacillating policy, produced by listening to theoretic dissertations and discussions on five thousand dollar bucks, would soon place him back again beyond the practical knowledge and experience of our forefathers. S. M. A.

☞ The amount of lumber annually cut on the Kennebec and Penobscot waters has been about 200,000,000 feet. Last season it was only 60,000,000 feet. The present season there will be cut about 100,000,000 feet.

For the New England Farmer.

MAPLE SUGAR.

MR. EDITOR:—Maple sap, as it runs from the trees, is clean, and it ought to be the aim of the manufacturer to keep it so through the whole process of boiling, &c. The buckets ought to be perfectly clean. I use tin buckets, as they are easily kept clean, and also conveniently distributed through the lot. The great source of impurity in the sap is bark and moss that fall from the trees, and leaves that are blown about during high winds and lodge in the buckets, and which, if not removed before boiling, give the sugar a very red color; therefore, the sap ought to be strained before boiling, and skimmed during evaporation. I prefer pans to kettles, the bottoms only being exposed to the fire, there being no chance for rising, and burning, and coloring the syrup.

Boil down quite thick, and set the pan from the arch on blocks for the purpose, and dip off and strain through a thick strainer, and then set away to cool and settle. When ready to sugar off, pour off carefully, as there will be a small quantity of sediment at the bottom, which should not be poured in with the syrup, but kept by itself, a quantity of sap put with it, and again settled and poured off, thus saving, ultimately, the whole. Do not add any foreign substance to syrup for the needless process of cleaning, but as it begins to boil, carefully skim, and my word for it, if you do not burn, you will have a nice article. Sooner give your skim milk to the pigs, take your eggs for your own eating, and your saleratus throw away, than to adulterate your syrup with them.

GARDNER HERRICK.

South Reading, Vt., March 19, 1863.

For the New England Farmer.

LITTLE THINGS,

OR, A WALK IN MY GARDEN.

After cutting some scions the other day, as I returned to the kitchen to look after the wants of the family, I heard the complaint that the wood did not burn well. This led me to enter a complaint against

COOKING STOVES.

When wood is abundant in the winter, the farmer wants a stove with a much larger fire box than any now in use. The village or city mechanic, who pays six or eight dollars a cord for wood, will use the strictest economy in the consumption of his fuel; but when it can be obtained by the farmer only for the expense of hauling, he can afford to give his family the comfort of a generous fire for all cooking purposes. The stove maker, then, who will introduce such a stove into the market will be sure to sell it in the country. Large air-tight stoves are much more economical in every respect than small ones.

One of the best little things a farmer can do, is to split up two or three cords of wood for summer use as fine as the finest kindling wood. Many a farmer's wife is compelled to do her work in hot weather over a heavy fire of coarse wood. She wants a fire that will blaze well to her teakettle, but which will not throw out much heat into the room. Some of the best summer wood I ever had was prepared in this way from second growth hemlocks with the bark left on; but as this is not always attainable, any kind of wood is vastly im-

proved by being split very fine for summer use. Not one-half the quantity of wood will be burned when prepared in this manner. Read this to your wife, and see if she does not heartily approve of it. But while I am writing this I am annoyed by an

ECHOING FLOOR.

As houses are now built, floors are apt to be very noisy annoyances. The timbers are so strained up that the floors become resonant like a drum. This often makes a schoolroom in a second story so troublesome to the rooms below as to be almost unsupportable. Now this can be easily remedied at a very trifling expense. After laying the under floor, nail down some sawed laths directly over and along the sleepers. These will show where to nail the upper floor. Now make a mortar of lime and sand, in which the latter ingredient may be in excess. It may be made thin. Pour it on to the floor and spread it just as thick as the laths, and let it dry before laying the second floor. Nail down the upper floor through the laths, and it will seem to you like walking on a brick pavement. Were I to build another house, I should serve all my chamber floors in this manner, unless somebody can point out a better method.

Bethel, Me., March, 1863. N. T. T.

EXTRACTS AND REPLIES.

A FINE HOG.

I sold Mr. A. C. How, of this town, a half-blood Chester county pig, which weighed when dressed at nine months and fifteen days old, 525 lbs.! I did not think much of that, but when I read what great things Maine and Vermont could do, I thought I would not have Massachusetts stay behind when she has done so much better. I have been a constant reader of the *Farmer* for over three years, and would not part with it for twice what it cost. J. P. H.

Gill, March, 1863.

BARN-ITCH—RELATIVE VALUE OF CORN AND BARLEY —DRY MEAL FOR HORSES.

Can you or any of your correspondents inform me of the cause or a cure of the barn itch on neat stock? I would also like to inquire as to the relative value of corn and barley as food for cattle, horses or swine. I would say that I have practiced feeding dry meal to horses with great success. K.

N. E. Village, March 16, 1863.

REMARKS.—Cole, in his "Diseases of Animals," says, "Give the animal as much salt and soot as it will eat, and in a few hours give from three-quarters to one pound of sulphur or pulverized brimstone. In twenty-four hours give a pound of salt." We should consider these as monstrous doses,—and should advise care in employing such agents.

ONIONS AND BEEF.

Your friend, "Mount Grace," who doubts the "onion story," can easily satisfy himself of the truth of the theory by a simple experiment. Let him buy a small quantity (1 or 2 pounds) of clean, white rice, which has been damaged sufficiently to exhibit, when cooked, an oily, half-rancid flavor, and feed it a few times to a chicken or fowl—then have the fowl killed and nicely roasted, having a little of the rice cooked at the same time. He will find the same peculiar flavor about equally strong in each. Ex.

PATENT OFFICE REPORT.

Can you inform me through the columns of the *Farmer* how I can obtain a copy of the Patent Office Report for 1862? W * * D.

REMARKS.—Send to the Commissioner of Agriculture, Hon. ISAAC NEWTON, or apply to the member of Congress from your district.

LEGISLATIVE AGRICULTURAL MEETING.

The tenth legislative agricultural meeting was held in the Representative Hall, on Monday evening, March 23d. We copy from the *Advertiser's* report:

Gov. ANDREW presided and opened the discussion, on the subject assigned for the evening,—"Agricultural Education,"—by calling attention to President Hitchcock's report on Agricultural Education in Europe, made thirteen years ago. Little was done further than to receive this report. He alluded to his appointment of a commission to locate an agricultural college, and to Mr. Bussey's will contemplating the founding of an agricultural college. It is easier to oppose than to act. Accordingly nothing available has yet been gained. Much has been done, however, by country societies, farmers' clubs and the Board of Agriculture to diffuse useful knowledge on the subject. The truth is this: nothing is done unless the aim be high. A low aim will accomplish little. Had the aim been higher and the flight bolder, more could have been accomplished. Massachusetts should not accept a low standard. It may do good to teach chemistry, physiology, zoology and astronomy to boys in school, but this does little good unless more be done. A man of general intelligence often takes in larger views than professors of colleges and schools, though the former had much less culture than the latter. The unwillingness to learn and the prejudice against doing so, cause many to stand still. All the sciences should be cultivated, as most of them are tributary to agriculture. Then there will be a growing science of chemistry, physiology, &c., because there are growing men engaged in them. We should begin to act in this matter. There is no occasion to delay longer. The educational institutions of the State should be popularized so that all the children of the Commonwealth shall be benefited by them. Enlarged and liberal views should be diffused among all the people of the Commonwealth. To our fame and our position we owe much. I have been pained, said the speaker, within the past three years, with the idea of our vassalage to the nations of Europe. We ought to be independent. We can bring men from other States and climes if we will it, and need them. We stand incomparably better than the nations of Europe for discovery, for progress and improvement. A young man should not make himself a lawyer by trade or a doctor by trade. A man can be put to a better use than making writs, drawing mortgages and collecting debts. Scientific agriculture has got to find its teachers to recover an exhausted soil that has been over-cropped by bad husbandry. When peace is restored, this wonderful work must be done by you of New England. Then will the desert blossom as the rose and the garden bloom as Eden. I desire, said the Governor in closing, to see our New England people take the subject of education into their own hand and liberalize it.

Mr. FLINT said the subject is one of great interest to our population. In looking forward to an agricultural college, we should not expect of it to diffuse what is known and in books, but for something original. Wherever this institution is located it should be controlled by men of skill

and ability to make original investigations. How this can best be done remains to be seen. Pennsylvania has got ahead of us. Let us learn from their experience and that of European institutions.

Mr. TOWER, of Lanesboro', said the people must first feel their want of knowledge before they will seek it. The young men of the State are beginning to feel the want of knowledge. He spoke of the magnitude of the agricultural interest of the Commonwealth. We have 30,000 farms, which give employment to about 400,000 persons; and about the same number are engaged in manufacturing. Our mechanics stand high; and by their skill and invention most of our labor is performed by the muscles of animals. Shall the college be independent or connected with some of the institutions in the Commonwealth?

Mr. WHITE, Secretary of the Board of Education, being called on to speak, urged the importance of beginning right. He rejoiced in the hope of the prospect for a professional education in regard to agriculture and the mechanic arts. Let us accept the grant. We don't know yet that we shall get anything.

Mr. MERRIAM, of Tewksbury, thanked the Governor for his speech and believed there is a defect in our educational system. A man can learn to be a minister, a doctor or a lawyer, but where can he learn to be a farmer? He spoke of the Bussy grant which should be used to endow a professorship of agriculture in Harvard College. The college should be located on a large farm of 300 or 400 acres.

FARMERS' WIVES OVERTAXED---No. 2.

Brutalities are thoughtlessly sometimes, and sometimes recklessly perpetrated by farmers on their wives as follows: A child or other member of the family is taken sick in the night; the necessary attention almost invariably falls on the wife, to be extended to a greater part, if not the whole night. Wearied with the previous day's duties, with those solicitudes which always attend sickness, with the responsibilities of the occasion and a loss of requisite rest, the wife is many times expected to "see to breakfast" in the morning, as if nothing had happened. The husband goes to his work, soon becomes absorbed in it, and forgets all about the previous night's disturbance; meets his wife at the dinner-table; notices not the worn-out expression on her face; makes no inquiry as to her feelings; and if anything on or about the table is not just exactly as it ought to be, it is noticed with a harshness which would be scarcely excusable if it had been brought about with a deliberate calculation.

The same thing occurs multitudes of times during the nursing periods of mothers. How many nights a mother's rest is broken half a dozen times by a restless, crying, or ailing infant, every mother and observant man knows. In such cases the farmer goes into another room and sleeps soundly until the morning; and yet, in too many cases, although this may be, and is repeated several nights in succession, the husband does not hesitate to wake his wife up with the information that it is nearly sunrise; the meaning of which is that he expects her to get up and attend to her duties. No wonder that in many of our lunatic asylums there are more farmer's wives than any other class; for there is no fact in medical science more positively ascertained, than that insufficient sleep is the most speedy and certain road to the madhouse. Let no farmer, then, let no mechanic, let no man, who has any human sympathy still left, allow his wife to be waked up in the morning except from very urgent causes; and further, let them give every member of the household to understand that quietude about the premises is to be secured always until the wife leaves her chamber; thus having all the sleep which nature will take, the subsequent energy, cheerfulness and activity which will follow, will more than compensate for the time required to "get her sleep out;" not only as to her own efficiency, but as to that of every other member of the household; for let it be remembered that a merry industry is contagious.

There are not a few farmers whose imperious wills will not brook the very slightest dereliction of duty on the part of any hand in their employ, and whose force of character is such that every thing on the farm, outside the house, goes on like clockwork. They look to their wives to have similar management indoors; and are so swift to notice even slight shortcomings, that at length their appearance at the family table has become inseparable from scenes of jarring, fault-finding, sneering, depreciating comparisons, if not of coarse vituperation, of which a savage might well be ashamed; and all this, simply from the failure to remember that they have done nothing to make the wife's authority in her domain as imperative as their own. They make no account of the possible accidents of green wood to cook with; of an adverse wind which destroys the draft of the chimney; of the breaking down of the butcher's cart; or the failure of the baker to come in time; they never inquire if the grocer has not sent an inferior article, or an accident has befallen the stove or some cooking utensil. It is in such ways as these, and millions more like them, that the farmer's wife has her whole existence poisoned by those daily tortures which come from her husband's thoughtlessness, his inconsideration, his hard nature, or his downright stupidity. A wife naturally craves her husband's approbation. "Thy desire shall be to thy husband," is the language of Scripture; which, whatever may be the specific meaning of the quotation, certainly carries the idea that she looks up to him, with a yearning inexpressible, for comfort, for support, for smiles and sympathy; and when she does not get these, the whole world else is a waste of waters, or life a desert as barren of sustenance as the great Sahara. But this is only half the sorrow; when, in addition to this want of approbation and sympathy, there comes the thoughtless complaint, the remorseless and repeated fault-finding and the contemptuous gesture, when all was done that was possible under the circumstances—in the light of treatment like this, it is not a wonder that settled sadness and hopelessness is impressed on the face of many a farmer's wife, which is considered by the thoughtful physician, as the prelude to that early wasting away, which is the lot of many a virtuous, and faithful, and conscientious woman.

The attentive reader will not fail to have observed, that the derelictions adverted to on the part of farmer husbands, are not regarded necessarily as the result of a perverse nature; but rather in the main, from inconsideration or ignorance;

but from whatever cause, the effect is an unmixed evil; and it is to be hoped that our religions papers and all agricultural publications will persistently draw attention to these things, so as to excite a higher sentiment in this direction. It can be done and ought to be done; and high praise is justly due to to the Honorable the Commissioner of the Agricultural Department, in that he has expressly desired, that an article should be written on the subject of the hardships and the unnecessary exposures of farmers' wives, to the end that information and instruction should be imparted in this direction; it is at once an evidence of a high, and manly, and generous nature.

There are some suggestions to be made with a view to lightening the load of farmers' wives, the propriety, the wisdom, and advantages of which cannot fail to be impressed on every intelligent mind.

A timely supply of all that is needed about a farmer's house and family, is of incalculable importance; and when it is considered that most of these things will cost less to get them in season, and also that a great deal of unnecessary labor can be avoided by so doing, it would seem only necessary to bring the fact distinctly before the farmer's mind, to secure an immediate, an habitual and a life-long attention. The work necessary to keep a whole household in easily running order is very largely curtailed by having everthing provided in time, and by taking advantage of those little domestic improvements devised by busy brains, and which are brought to public notice weekly, in the columns of newspapers.

It requires less time and less labor to have the winter's wood for house-heating and cooking brought into the yard and piled up cozily under a shed or placed in a wood-house, in November, than to put it off until the ground is saturated with water, allowing the wheels to sink to the hub in mud; or until the snow is so deep as to make wheeling impossible.

It is incalculably better to have the potatoes and other vegetables gathered and placed in the cellar or in an outhouse near by, in the early fall, so that the cook may get at them under cover, than to put it off week after week, until near Christmas; compelling the wife and servants once or twice every day, to leave a heated kitchen, and most likely with thin shoes, go to the garden with a tin pan and a hoe, to dig them out of the wet ground and bring them home in slosh or rain. The truth is, it perils the life of the hardiest persons, while working over the fire in cooking or washing, to go outside the door of the kitchen for an instant; a damp, raw wind may be blowing, which, coming upon an inner garment, throws a chill, or the clamminess of the grave, over the whole body in an instant of time, to be followed by the re-action of fever, or fatal congestion of the lungs; or by making a single step in the mud, which is in tens of thousands of cases allowed to accumulate at the very door-sill, for want of a board or two, or a few flat stones, not a rod away.

No farmer's wife who is a mother ought to be allowed to do the washing of the family; it is perilous to any woman who has not a vigorous constitution. The farmer, if too poor to afford help for that purpose, had better exchange a day's work himself. There are several dangers to be avoided while at the tub—it requires a person to stand for hours at a time; this is a strain upon the young wife or mother, which is especially perilous—besides, the evaporation of heat from the arms, by by being put in water and then raised in the air alternately, so rapidly cools the system that inflammation of the lungs is a very possible result; then, the labor of washing excites perspiration and induces fatigue; in this condition the body is so susceptible to taking cold that a few moments' rest in a chair, or exposure to a very slight draft of air, is quite enough to cause a chill, with results painful or even dangerous, according to the particular condition of the system at the time. No man has a right to risk his wife's health in this way, however poor, if he has vigorous health himself; and, if poor, he cannot afford, for the five or six shillings, which would pay for a day's washing, to risk his wife's health, her time for two or three weeks, and the incurring of a doctor's bill, which it may require painful economies for months to liquidate.

Every farmer owes it to himself, in a pecuniary point of view, and to his wife and children, as a matter of policy and affection, to provide the means early for clothing his household according to the seasons, so as to enable them to prepare against winter especially. Every winter garment should be completed by the first of November, ready to be put on when the first winter day comes. In multitudes of cases valuable lives have been lost to farmers' families by improvidence as to this point. Most special attention should be given to the underclothing; that should be prepared first, and enough of it to have a change in case of an emergency or accident. Many farmers are even niggardly in furnishing their wives the means for such things; it is far wiser and safer to stint the members of his family in their food than in the timely and abundant supply of substantial under-clothing for winter wear. It would save an incalculable amount of hurry and its attendant vexations, and also of wearing anxiety, if farmers were to supply their wives with the necessary material for winter clothing as early as midsummer.

Few things will bring a more certain and happy reward to a farmer than for him to remember his wife is a social being, that she is not a machine, and therefore needs rest, and recreation, and change. No farmer will lose in the long run, either in money, health, or domestic comfort, enjoyment, and downright happiness, by allotting one afternoon in each week, from midday until bedtime, to visiting purposes. Let him, with the utmost cheerfulness and heartiness, leave his work, dress himself up, and take his wife to some pleasant neighbor's, friend's, or kinsman's house, for the express purpose of relaxation from the cares and toils of home, and for the interchange of friendly feelings and sentiments, and also as a means of securing that change of association, air, and food, and mode of preparation, which always wakes up the appetite, invigorates digestion, and imparts a new physical energy, at once delightful to see and to experience; all of which in turn tend to cultivate the mind, to nourish the affections, and to promote that breadth of view in relation to men and things which elevates, and expands, and ennobles, and without which the whole nature becomes so narrow, so contracted, so jejune and uninteresting, that both man and woman

become but a shadow of what they ought to be.

Let the farmer never forget that his wife is his best friend, the most steadfast on earth, would do more for him in calamity, in misfortune, and sickness, than any other human being, and that on this account, to say nothing of the marriage vow, made before high heaven and before men, he owes to the wife of his bosom a consideration, a tenderness, a support, and a sympathy, which should put out of sight every feeling of profit and loss the very instant they come in collision with his wife's welfare as to her body, her mind, and her affections. No man will ever lose in the long run by so doing; he will not lose in time, will not lose in a dying hour, nor in that great and mysterious future which lies before all.—*Hall's Journal of Health.*

RAISING CALVES.

MR. EDITOR:—I notice in the last *Telegraph* an article on the above subject, which is altogether very good, but in some few ways I differ from the writer. Allow me to give my plan, and let your readers choose for themselves.

In the first place, about the *paying part.* That alone has of late years prevented me from raising stock. Within a certain distance from the city, where farms sell from $175 to $250 an acre, I think it will not *pay* to raise stock, unless the price of stock is much higher than it has been for a year or two; but when you do raise stock, by all means have good stock to raise from.

My plan was, if I were going to raise a calf, not to allow it to suck the cow. It will learn to drink alone much easier. I have had them drink alone before they were twelve hours old. I like to have three or four to start at a time, and to start them a few weeks before pasture. After that, if they run where there is water, shade and grass, they will want but little care until fall, when they should have shelter at nights, and a little hay, roots or brewers' grain are excellent to feed them during the winter season, to keep them in a thrifty condition. By all means keep them growing for the first three years, and if heifers, not to allow them to have a calf until three years old; and you will have cows that, when your friends call, you will not be ashamed to take them to the barn to see your stock.—*Germantown Telegraph.*

GERMAN MODE OF PRESERVING OR TRANSMITTING CUTTINGS OF PLANTS TO A DISTANCE.—Cylindrically shaped strong glass bottles with wide mouths are used, into which the cuttings are thrown just as they are taken from the plant; from a teaspoonful to a tablespoonful of water is put in the bottle and the stopper hermetically sealed up. Cuttings kept in this way for a month have grown most freely, and instances have occurred where they have sent out roots during a journey from Edinburg to Vienna, and being immediately potted on their arrival have grown freely.

A GOOD REMEDY FOR A FELON is made of common soft soap and air-slacked lime, stirred till it is of the consistency of glazier's putty. Make a leather thimble, fill it with this composition, and insert the finger therein; and, our informant says, a cure is certain. This is a domestic application that every housekeeper can apply promptly.

THE CULTURE OF WHEAT.

"Bread is the staff of life." Wheat bread is so universally popular, and what, according to the analyses of the chemists, contains so much nourishment as wheat bread? There is no other so palatable to most persons, and, at the same time, that can be eaten so long without palling on the appetite, as the bread of wheat flour.

There is no crop, also, more easily raised on suitable lands, or that may be grown to more profit to the farmer or more benefit to the State. It sometimes fails, as do most other crops, but even this failure is quite likely to be considerably checked, when we come to understand its true mode of cultivation,—such, perhaps, as the preparation of the seed and getting it into the ground early.

In England, one of the best farming countries of the world, wheat is the principal crop, that upon which the farmer mainly relies, says Mr. Colman, for his money returns, and for the payment of his labor and rent, and to which his attention is principally directed. In France, an immense crop of wheat is gathered. Statistical accounts have shown that in England upwards of *one hundred and eleven millions of bushels* have been raised in a year, and in France about *two hundred millions of bushels!*

In all our States, out of New England, this crop, as in Great Britain, is the money crop. In the Western States, a farmer who has a crop of wheat in the ground, gets what he wants for his family at the nearest store on the credit of the wheat, and when ready for market it is hauled to the store and received in payment, and the balance, if any, credited to the farmer, passing thus as the medium of payment in the dealings of the farmer at the store: or, otherwise, is carried to the nearest mill, and sold for cash.

It is always a cash article where nothing else is, and always easily transferable as cash, or as the best and readiest medium in exchanges. In the middle States, in Pennsylvania, New York, Maryland; in Virginia and Ohio, it is on about the same footing in commerce, and is, in like manner, relied upon as the thing needful to the farmer to pay for those articles of necessary use which he does not raise and is obliged to buy. It may undoubtedly be made as important in the produce of a Massachusetts farm.

It should be remembered by every farmer, that it is not so much the amount of what he produces that enables him to succeed in his business, as what he is able to retain and use for his own pleasure. His first effort, therefore, it seems to us, should be to produce, himself, everything required for use in his own family:—that is, everything adapted to the climate and his peculiar location and soil. This saves transportation, loss in exchanges, and loss of time in marketing. It would require a considerable amount of all these,

to raise corn or potatoes enough to exchange for the flour, for a year, required by a family of eight or ten persons. Would it not be better for New England farmers, as a general thing, to devote an acre to wheat, save all the cost incident upon exchanging, and eat the product of their own fields? We think it would. A farmer needs a good deal of skill to trade advantageously with those whose wits are sharpened by making trade the business of life, and who are too often unscrupulous in their transactions. The more directly the farmer's products come from his fields to his table, the more profit he will find in them.

NEW BOOKS

AGRICULTURE OF MASSACHUSETTS. For the year 1862. By Charles L. Flint, Secretary of the State Board of Agriculture. Boston: Wright & Potter, printers. 1 vol., 8 vo., 692 pp.

We have before us the *Tenth Annual Report* of the Secretary of the *Massachusetts Board of Agriculture*, Reports of Committees, and some account of a *Trip to Europe* by the Secretary, during the last summer.

The first paper of the volume relates to the breaking out, anew, of the pleuro-pneumonia, in Norfolk county. The next relates to the premium offered by various county societies for the best conducted experiments on the application of manures. Then follows a report on *Fruit Culture*, with a *Catalogue* of Fruits, *adapted to the Commonwealth of Massachusetts, and with special reference to Nomenclature*, and one on *The Cultivation of the Grape* in Massachusetts, embracing the topics of *Soil, Aspect, Manures, Preparation of the Soil, Planting, Distance apart, Pruning, Propagation, Raising New Varieties from Seed, Hybridizing, and Profits of Grape Culture.* In a report on the *Sheep Law*, we learn that 3,124 dogs have been licensed, and an estimate that 1,126 still run *unlicensed.*

A paper upon the *Insects of Massachusetts which are beneficial to Agriculture*, by Mr. FRANCIS G. SANBORN, Curator of Entomology, is a valuable one. It is written in the most popular manner in which the subject can be treated, is numerously and handsomely illustrated, and contains much information long desired hy the agricultural community.

The next paper is Mr. FLINT'S brief report of his *Trip to Europe*, which is all too short, crowded as it is, with the interesting things which he saw or heard in his travels. We cannot, now, specify, but shall find room hereafter for some portions of his interesting narrative.

The reports of delegates who visited the various County Societies, extracts from addresses delivered at the annual meeting, with reports of several committees on farms, &c., make up the rest of the volume. The volume is a valuable one. Its subjects are practically treated, and are generally entitled to serve as a guide in the operations of our farmers. It is too valuable to be thrown together in the unworkmanlike manner in which it is presented. It is well printed, on good paper, and is in good binding—but the *"making up,"* as it is technically termed, of its pages, does not show a particle of the skill of the craft. For instance:—The article on the sheep and dog law page 109, occupies about eight pages, ending with a table of "rule and figure" work, when the next paragraph, without any indication that the subject has been changed, introduces an important report from a select committee. Again, on page 123, Mr. Sanborn's report on Insects—a paper of 60 pages—is introduced in two lines, *at the bottom of the page*, and without any indication whatever that the paragraph did not belong to the previous subject.

On page 186, Mr. Flint's report of his trip to Europe, is dignified by opening a page, because the preceding page was full into a single line. The State will feel the loss of that line! This report deserves a more formal introduction. It certainly should have had a *"half-title,"* if nothing more.

These examples are sufficient. The contents of the work are crowded in continued succession, one subject rushing into another, without anything to indicate that the story upon which one begins, is ended. When so much talent and labor have been expended, the State can certainly afford to have it arranged in a skilful and int elligible manner.

For the New England Farmer.

BREAD MAKING.

From an Essay read before the Concord Farmers' Club, by J. REYNOLDS, M. D.

The grains which we use for bread consist chiefly of starch, sugar and gluten. The object of forming them into bread is to effect such a change in them as will render them more palatable and more easily digested. The grain is first pulverized and then sifted, to separate the different qualities of the meal. The external, or woody portion of the grain is the bran. The inner portion is the flour. The gluten is tough, and the most difficult to grind. The finer and whiter portion obtained by repeated siftings, consists of a large proportion of starch. The darker colored part is richer in gluten, and as the nutritive properties are in proportion to the gluten, that portion makes the most nutritious bread.

When flour is mixed with water, kneaded into dough and baked, it will be tough and clammy. If spread and cut into a thin sheet, it will be hard and horny. In neither case will it be palatable or easily digested. To avoid these results, and to form a light, spongy dough, different methods are adopted. If a paste of flour and water be permitted to stand some days in a warm place, it commences to putrefy and grows sour. If a small portion of this sour paste be incorporated into fresh dough, the decomposing gluten acts upon the sugar of the flour and excites what is called the

vinous fermentation, changing the sugar into alcohol and carbonic acid. The carbonic acid is set free in the form of minute bubbles of gas throughout the whole substance of the dough, and being retained by the adhesive gluten, it causes the whole mass to swell or rise. These bubbles form the pores or small cavities, which in well made bread are small and uniform,—but if the dough is too watery, or not well kneaded, or, if the flour is too fine, there are sometimes large, irregular cavities or holes in the bread. If the process of fermentation is carried too far, the vinous fermentation passes into the acetous, and the alcohol is changed into vinegar, and the dough becomes sour.

This may be corrected by the addition of soda or magnesia, which gives no disagreeable taste, and acts as a gentle laxative, and is wholly unobjectionable. By fermentation, the bread is made light at the expense of the sugar in the flour, which, as I have said, is changed into alcohol and carbonic acid, both of which are driven off by the process of baking.

Any method by which a gas is set free throughout the mass answers the purpose. If carbonate of soda is mixed with the flour, and muriatic acid largely diluted be added, the acid and soda unite, forming common salt. And the carbonic acid, previously combined with the soda, is set free rapidly, forming a very light sponge. This must be kneaded immediately, and forms a very palatable bread, containing nothing injurious. Ammonia, in the form of a carbonate, is often used in making cake. This is often driven off by the heat in baking. The effect of heat upon the gluten and starch in the process of baking is to cause them to form a chemical compound which cannot be separated by washing with water, as could be done when they were in the state of flour. In consequence of this change, and of its light, spongy form, bread becomes more easily soluble in the stomach. The water added to the flour forms about one-third the weight of the bread. That which is not evaporated, is converted into a solid, and forms a chemical union with the bread. Wheat flour contains all the elements contained in milk and blood, though not in the same proportion. These proportions are easily adjusted in the stomach. Hence, wheat is better suited than any other known substance for animal nutrition.

For the New England Farmer.

COE'S SUPERPHOSPHATE.

MR. EDITOR:—In a number of the *Farmer*, dated March 28th, I noticed an inquiry of J. E. Morse, Peterboro', N. H., in regard to the use and benefit of Coe's Superphosphate of Lime. Allow me to answer the inquiry briefly, for the benefit of others as well as Mr. Morse. It is a good topdressing, and profitable if the ground is well harrowed, so that it is sufficiently loose to receive it; and then it should be sown on a rainy day. For corn it is unequalled as a special fertilizer. A small tablespoonful in the hill at the time of planting will do very well—but repeated at second hoeing, it will add to the crop twice its cost and mature it ten days earlier, saving the risk of frost, which will pay for the cost. The grain is also heavier and brighter. Three hundred pounds per acre, for corn, or topdressing, is sufficient; for peas or beans, seven hundred and fifty pounds will answer; for potatoes, I would recommend four hundred pounds, if there is no other manure. When worked into the soil the effect is quite lasting; as a topdressing it is sooner spent. But in these days of cropping I think few persons in New England can afford to do without it.

West Meriden, Conn., 1863. R. LINSLEY.

For the New England Farmer.

METEOROLOGICAL RECORD FOR FEBRUARY, 1863.

These observations are taken for, and under the direction of the Smithsonian Institution.

The average temperature of February was 22°; average mid-day temperature, 29. The corresponding figures for Feb., 1862, were 19° and 27°; for Feb., 1861, 26° and 33°. The warmest days were the 15th, 20th and 27th, averaging 39°; coldest day the 4th, averaging 17° below zero. Highest temperature, 46°; lowest temperature, 23° below zero.

Average height of mercury in the barometer, 29.41 inches; do. for Feb., 1862, 29.25 inches; do. for Feb., 1861, 29,21 inches. Highest daily average, 30.04 inches, on the 5th; lowest do., 28.63 inches, on the 20th. Range of mercury from 28.52 inches to 30.12 inches. Rain fell on four days—snow on nine days. Amount of rain and melted snow, 3.12 inches; do. of snow, 14.50 inches; corresponding figures for Feb., 1862, 3.10 inches and 31 inches; for Feb., 1861, 2.98 inches and 15.50 inches. There were two entirely clear days; one day was entirely overcast. It will be noticed that the greatest elevation of the barometer was about coincident with the lowest temperature, and the lowest barometer with the highest temperature.

Average temperature of the winter of 1862–3, 25°; of 1861–2, 22°; of 1860–1, 22°. Total am't of snow during the winter of 1862–3, 52.25 inches; of rain and melted snow, 8.37 inches; do. for winter of 1861–2, 77 inches and 8.25 inches; do. for winter of 1860–1, 93.25 inches and 10.53 inches.

Claremont, N. H., March, 1863. A. C.

HEALTH—*Our Feet.*—Women are not more hardy than men. They walk on the same damp, cold earth. Their shoes must be as thick and warm. Calf or kip skin is best for the cold season. The sole should be half an inch thick; in addition there should be a quarter of an inch of rubber. The rubber sole I have used for years; I would not part with it for a thousand dollars. It keeps out the damp, prevents slipping, and wears five times as long as leather of the same cost. For women's boots it is invaluable. But rubber shoes should be discarded. They retain the perspiration, make the feet tender and give susceptibility to cold. Stand on one foot, and mark around the outspread toes. Have your soles exactly the same width. Your corns will leave you. The narrow sole is the cause of most of our corns. A careful study of the anatomy of the feet and the influence of a narrow sole will satisfy every inquirer. The heel should be broad and long.

Wear thick, woollen stockings. Change them every day.

Before retiring, dip the feet in cold water. Rub them hard. Hold the bottoms to the fire till they burn.—*Dr. Lewis.*

IF WE KNEW.

If we knew the cares and crosses,
Crowding round our neighbor's way,
If we knew the little losses,
Sorely grievous day by day,
Would we then so often chide
For his lack of thrift and gain—
Leaving on his heart a shadow,
Leaving on our lives a stain?

If we knew the clouds above us,
Held by gentle blessings there,
Would we turn away all trembling
In our blind and weak despair?
Would we shrink from little shadows
Lying on the dewy grass,
While 'tis only birds of Eden,
Just in mercy flying past?

If we knew the silent story
Quivering through the heart of pain,
Would our womanhood dare doom them
Back to haunts of guilt again?
Life hath many a tangled crossing,
Joy hath many a break of woe,
And the cheeks tear-washed are whitest;
This the blessed angels know.

Let us reach into our bosoms
For the key to other lives,
And with love toward erring nature,
Cherish good that still survives;
So that, when our disrobed spirits
Soar to realms of light again,
We may say "Dear Father, judge us,
As we judge our fellow-men."

Foreign Exchange.

EXTRACTS AND REPLIES.

SEEDS—CURRANTS AND RASPBERRIES—BRONZE TURKEY—BRAHMA FOWLS.

1. I wish to inquire what kind of vegetable seeds are good only at one year old? what kind at two? and what three years or more? (Common kinds only.)
2. Should currants and raspberries be set in partial shade?
3. In what does the superiority of the Bronze turkey consist?
4. Are the genuine Bramah fowls clear white, or streaked with black on neck or tail? Ex.

March, 1863.

REMARKS.—1. The egg plant, various kinds of onions, parsnip and thick-skinned squash are safe only for one year.

Beans should not be planted that have been kept more than two years,—nor carrots, celery, spinach or tomato seeds.

Asparagus seed is good at three years,—so are lettuce and peas.

But broccoli, cauliflower, cabbage, cucumber, melon, radish, squash and turnip seeds are supposed to remain good for from five to ten years—so says Mr. SCHLEGEL, at 20 South Market Street, Boston,—one of the best informed seedsmen in our knowledge.

2. We are not aware that currants and raspberries flourish any better for being partially shaded, after they are once thoroughly established in the ground. We have cultivated them successfully in the sun, and just as well when partially shaded.

We must leave the other questions for some one better informed.

—

HUNGARIAN GRASS.

I have seen communications frequently in the *Farmer* on Hungarian grass. I would like to make one suggestion in its favor in relation to its being fed to milch cows. I raised some two years ago, and in the winter tried it in various ways—the sheep, horses and cattle all being very fond of it. It improved the quantity and quality of the milk at once. I sold half a ton to one of my neighbors for his cow. His experience accords with mine. He said it improved the color and taste of the butter. I am now feeding with the same result.

I wish to know where I can obtain one-half bushel of flax seed, and at what price? some that will be adapted to the latitude of Central Vermont or New Hampshire. "Agriculturist," in his letter No. 2, has given so minute a description of the whole process of raising, that I think I can do it; at any rate I can try.

North Thetford, Vt., 1863. M. D. BAXTER.

REMARKS.—Flax seed is high at present—probably $3 50 or $4 00 per bushel. It usually sells for about half that sum.

—

HORSE RAKES.

Will you inform the boys of New Hampshire of the best horse rake in use, and the cost? Also the best one or two-horse mower, and the cost? Also the cut, or plan, if convenient. Most of our help has left to work for Uncle Sam; so much so, we are almost obliged to do our labor with horses, or at least, as far as we can. E. H.

Upper Gilmanton, N. H., 1863.

REMARKS.—There are two horse rakes about to be introduced, which we shall notice by-and-by.

—

SETTING UP BIRDS.

Will you through the *Farmer* inform me of the best manner of preserving, stuffing and curing birds? I want to know the whole *modus operandi*, so far as the materials used in preserving and stuffing are concerned. Of late, we have been visited with many rare kinds, uncommon in this country, and at this season. If you will oblige me in this matter, you will confer a favor on a friend and a reader.

CHANNING E. HAZELTINE.

South Strafford, Vt., 1863.

REMARKS.—We will publish a complete article on the subject, soon.

—

WARTS ON CATTLE.

I wish to inquire through the columns of the *Farmer* if there is any cure for warts on cattle. I have a valuable cow which has a number of large warts. Will some of your numerous readers prescribe a remedy, and much oblige S. F. A.

Bellows Falls, March, 1863.

LEGISLATIVE AGRICULTURAL MEETING.

The *Eleventh* meeting of this series took place at the State House on the evening of March 30. The subject for discussion was the *Culture of Flax*. STEPHEN M. ALLEN, Esq., President of the National Fibrilia Company, spoke as follows:

In both England and France the change from the use of linen to cotton was attended with much difficulty. It was principally brought about by the influence of new machinery, invented for carding and spinning short-stapled fibres at much less cost than long-line fibres could be manufactured. This difference in manufacture is as marked now as it was then, and has given birth to the fibrilizing process, which admits of the preparation of flax or hemp for spinning on short-stapled machinery usually employed for the manufacture of cotton and wool.

The transition wrought in England by the inventions of Paul, Hargrave, Arkwright and Crompton, in the introduction of power spinning and weaving, was so great that whole neighborhoods became disturbed by mobs, composed of hand spinners and weavers who feared being thrown out of work. The governments of both England and France had to interfere, and laws were made to regulate the manufacture of cotton goods, restricting them to linen warps. These

laws were in force for many years, and regulated the manufacture of calico to a great extent.

In America, the manufacture of linen was among the first of domestic products. Hand wheels and looms were introduced into almost every farm-house, and in many cases a surplus of linen was manufactured, beyond private domestic use, and was sent to market and sold. In some cases, as at Londonderry, large amounts of goods were annually made for market by the Scotch Irish, who settled there, and a trade mark was given them for the protection of their linen from counterfeits from other but inferior producers.

The value of linen has not been diminished, but rather has increased since cotton came into general use, but its manufacture is mostly confined to Europe. The great scarcity of cotton at the present time has made it a subject of more general interest than for many years in the past.

Flax cotton has been a subject of investigation and research for more than a century, but the experiments have, generally, almost entirely failed.

The fibrilizing process of flax and hemp however is a perfect success, and at the present time an article of fibrilia is made which answers a good purpose for both cotton and wool, and can be spun and woven on the ordinary machinery for those staples with but little necessary alteration.

In the production of this article the whole process of the manufacture of flax and hemp has been changed. The gathering of the raw flax, the extraction of the woody matter of the stalk, as well as the dissolving of the gummy matter holding the fibrils together, and the preparation for spinning and weaving, or coloring and bleaching, has no analogy with the manufacturing process of long line flax for linen. The whole process is accomplished for less than one-third the cost per pound of long line fibre, while for calicoes mixed half and half with cotton, it is much better than cotton.

The whole process of manufacture is very simple. The flax or hemp straw is mown or cradled like grain, and is cured like hay, after which the seed is threshed out in the ordinary way. It is then passed through the brake, which takes out fourteen hundred pounds of shives out of every two thousand pounds of straw, (the shives, if unrotted, being good for cattle,) and the fibre is then steeped in the retort with warm water at different temperatures, which dissolves the glumien in the fibre, after which it is rinsed or washed before coming up to the boiling point. It is then dried and run through the stranding and cleaning machine, followed by carding, spinning, &c., on short stapled machinery. If it needs bleaching or coloring, it may be done in the retort at first, before removing— the different liquors being passed through the receiver to bleach or color, as the case may be.

The cost of fibrilia thus made, provided the manufacturer buys and brakes his flax under his own supervision, and at the present cost of straw in the West, is about from ten to twelve and one-half-cents per pound. In ordinary times it can be manufactured so as to mix half and half with cotton for calicoes for eight cents per pound. All that is now needed is a multiplicity of the same machinery we are now making to supply the world with a substitute for cotton and wool in great abundance.

The success of fibrilizing flax and hemp as substitutes for cotton and wool has been placed beyond a doubt. The time necessary to bring out fibrilia in such quantities as to supply the world with that product must be determined by the co-operation of the people in building mills and furnishing capital, the same as in any other branch of business.

Messrs. Wilkinson & Wheeler, of Roxbury have adopted the fibrilia principle in making crash, and are succeeding beyond expectation.

The mills now running under our system, though comparatively small, are making satisfactory goods, and the profits are quite large enough to satisfy the most fastidious money-maker. The tendency now, however, is so speculative, both by the farmer who raises the flax, and the capitalist that we have had to use a restraining rather than an encouraging influence to keep each in proper check, lest both should be carried on too fast and too far, simply because though they were willing to give their lands and money to the enterprise, they were not studying the subject properly as they advanced.

If the friends of the fibrilia enterprise have erred in the minds of capitalists in one way more than any other, it has been in keeping the subject free from speculative influences, which, though promising largely at first, might not be so well for the proprietors in the long run.

The *twelfth* meeting of the series took place Monday, April 6. Mr. BROWN, editor of the *N. E. Farmer*, was elected chairman. He said he was gratified to address the society in a somewhat unusual, but pleasant form, as "*ladies* and gentlemen"—there being several ladies present. He spoke at some length upon the *un*productive condition of wet and heavy lands, of the great labor to cultivate them, and their liability to *drought*, and the consequent decay of plants growing upon them. He urged the necessity of thorough drainage as one of the leading improvements of the age in farm pursuits. This he attempted to show by

1. The *disadvantages* of cultivating wet lands.
2. The *prevention* of drought.
3. The *mechanical* and *fertilizing* effects of a shower upon thoroughly drained land, in contrast with its effects on undrained land.
4. The *variation* of the season in consequence of drainage.
5. The *less cost* of cultivation on land made porous, warm and friable, by drainage, and the great increase of crop, with the same amount of manure, and at a greatly reduced amount of labor.

Mr. BROWN briefly illustrated these points by results gained in his own experience in draining wet uplands. He then called upon others to state their views upon this important subject.

Mr. WARREN, of Auburn, said he had drained lands for several years. Wet lands bordering on swales should be drained. He drained such lands, and it improved them so much that six hills of potatoes made a bushel. His first crop more than paid for the labor of drainage. He drained to the depth of from two to three feet, filled the drains with stone, and covered them with straw and turf, and had since gathered annually a good crop of hay. He found it was a good piece of land.

Mr. SMITH, of Granby, gave his experience in draining swale, and found it profitable.

Mr. HOWARD, of Boston, endorsed the practice of land drainage, especially of clay lands. It costs about fifty cents a rod to dig drains here. In Western New York, it can be done for thirty cents.

Mr. WETHERELL, of Boston, spoke strongly in favor of drainage. He maintained that drains in clay soil should not be laid less than four feet deep. In speaking of soils, he said that sand, when thoroughly dried, 100 pounds of it would hold or absorb 25 pounds of water; loam, 100 pounds in the same condition would absorb 40 pounds of water; and pure clay, 100 pounds would absorb 70 pounds of water. This, he said, showed the different character of soils. He urged this improvement as the one that must be accepted by farmers. No farmer that has wet lands can afford to till them undrained.

Mr. FLOWER, of Agawam, said that for the first time we are all agreed that drainage is important, however, we may have differed on other subjects. He mentioned practical results in his vicinity.

Mr. DREW advocated drainage, giving both experience and observation in its favor.

Mr. TOWER, of Lanesboro', spoke of the beneficial results of drainage, and highly commended it.

A gentleman from Springfield gave an instance in the Connectiut Valley where drainage destroyed *mosquitoes*,—a new reason added to the important ones already known.

For the New England Farmer.

EXPERIMENTS IN FEEDING PIGS.

MR. EDITOR:—Your correspondent of Kensington, N. H., undertakes to prove in the last *Farmer*, that the pig which I spoke of in a late number, weighing 400 pounds at nine months old, and fattened on mush, ate 28 bushels of meal, according to Mr. Ellsworth's experiments; which, at 70 cents per bushel, is equal to $19,60. Now, my figures are different from Mr. Ellsworth's, in respect to the amount of meal it takes to make a pound of pork. The pig which I refer to was shut up in a small pen, while Mr. Ellsworth's, perhaps, were allowed to run about in a field. I wish to show my friend, Mr. Brown, of Kensington, some figures that he can depend on, and if he has fattened a pig any cheaper by feeding it raw corn, I, for one, would like to know it. Figures will not lie.

The pig to which I refer ate no other food to any amount, but cooked meal, with occasionally a little sour milk. The amount of meal that it consumed was 747 pounds, or 13½ bushels, which, at 70 cents per bushel, is equal to $9,33. We see by this, that less than two pounds of meal cooked made one pound of pork. Old corn was used, which is far better than new. One bushel of it fed to swine, in July or August, is worth nearly as much as two of new corn, fed in November.

In trying experiments, there are a good many things to be thought of and taken into account. There is a great difference in breeds of hogs; some require only a small amount of food to fatten them, while others require a large amount. A hog of the right breed and disposition will eat its food and lie down satisfied, while a land-pike sort of a hog will eat all it can get, and squeal the rest of the time. The same amount of meal that would fatten one hog of a good breed, would go but little way towards fattening another hog of a poor breed. I think farmers are not particular enough in their choice of breeds. If they go to purchase a horse, they are very particular to get a Morgan or Black Hawk; but in purchasing pigs, they generally purchase those that they can buy the cheapest. Mr. B. thinks that mush may satisfy at first, but that it needs something that will stick by the ribs to finish off with. I have seen pigs fattened so fat on mush, that they could scarcely stand on their feet, and that is as fat as I want hogs. I still contend that it is the most economical way to fatten pigs on cooked meal. But, says one, you do not get pay for your extra labor; let us see about that: When raw corn is fed to hogs they do not grind more than two-thirds of it, so one-third of it is lost. Will that one-third saved by grinding and cooking, pay for the extra labor, or not? I think it will, and when we take into account the extra labor of cultivating that third, we cannot come to any other conclusion, if we are willing to admit the truth, but that it is the most economical and correct way, in New England, and in every State where corn is worth from 70 to 90 cents per bushel, to grind and cook it for swine. In some parts of the western States, where they use corn for fuel, because it is cheaper than coal or wood, it will not pay to cook it.

Mr. B. refers us to the Post-Office Reports of 1851, where a few Westerr men give it as their opinion, that it will not pay for them to even shell their corn to feed. I suppose Mr. B. is aware, as well as myself, that, at the time they wrote, corn was worth in the Western States from 12 to 20 cents per bushel, shelled; and pork from $2 to $3 per hundred pounds. Corn has been so abundant there, some years, that it would scarcely pay to harvest it, and send it to market. Under those circumstances, where corn is scarcely worth harvesting, I do not contend that it would pay to cook it to feed any kind of stock.

Here, in New England, it costs some labor to raise a bushel of corn; therefore we should use economy, and feed it in the way that it will do the most good.

O. P. MEAD.

Middlebury, Vt., Feb., 1863.

BEST TIME TO FEED GRAIN TO SHEEP.—Noon is preferred to morning for this purpose by a correspondent of the *Country Gentleman*, for three reasons: First, because, at noon, their appetites are partly satisfied, and therefore the stronger ones will crowd the weaker ones less than they would do in the morning; second, because sheep will eat the coarser fodder better before eating grain than afterwards; and, third, because, by eating at noon, the grain will be better mingled with the coarser fodder already swallowed, and be more likely to rise with their cuds for thorough mastication, by which the greatest amount of nutriment will be extracted from a given amount of food.

THE California flood of January, 1862, was the highest known in the State for centuries. This is proved by the fact that Indian mounds of great depth, bearing unmistakable evidence of great antiquity in the large oaks growing upon them, were almost entirely carried away, trees and all.

For the New England Farmer.

THE PRICE OF MILK.

MR. EDITOR:—This is a subject which possesses much interest for a large number of the readers of the *Farmer*. It is one of those matters upon which much has been said, but very little done, upon the side of the producers, the matter having been left entirely to a few milkmen, who have, for the last few years, so well improved their opportunity, that milk is now bought by them at prices very far below its actual cost of production.

Whenever the prices of other things have been a little less than usual, the price of milk has been reduced also, but now, when everything which the farmer must purchase has gone up from 50 to 400 per cent. above former prices, these milkmen seem determined to keep down the price to about the old rates, if possible.

I wish to ask if there is not a remedy for this state of affairs? It seems to me that there is, if milk raisers would only bestir themselves a little. Why should not they do as other manufacturers have been doing, and call a milk raisers' convention, to establish an equitable scale of prices, and invite all the towns which are interested to send delegates? The idea seems practicable, and if a few influential men would only start the thing, I think it might be easily accomplished. The present time seems to be a favorable one, and there can be no question, I think, that, at the present retail prices, the milkmen can afford to pay a much higher price per can than they are now paying.

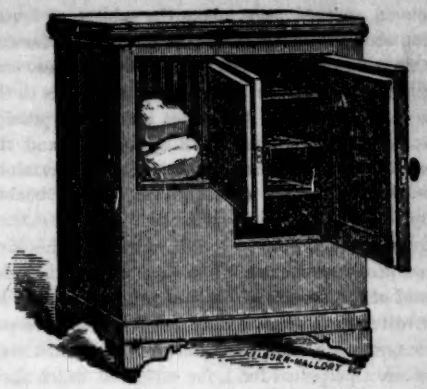
Are all of our farmers aware of the fact, that the can of milk which they have sold for from 22 to 25 cents, is retailed in the city for six cents per quart, wine measure, amounting to nearly or quite sixty cents per can? X. Y. Z.

Middlesex County, Mass., April, 1863.

REMARKS.—We understand that a law has just been passed in the Legislature, which declares that "*Whoever buys or sells milk by any other measures, cans or vessels, than those sealed as provided in the 15th section of the General Statutes*, shall for one violation pay $20, and for a second and each subsequent violation $50. Enforce this section of the law, and another in relation to the adulteration of milk, and farmers will soon get a fair price for what they have to spare.

WOMEN WITH RAKES AND SPADES.—One of our agricultural contemporaries says: "These times are bringing out the best qualities of our American women; but there is one sort of out-door labor which should be participated in by women in all times, and that is gardening. Now is the time to commence operations for the season. If the ground is wet, and you have no thick boots of your own, pull on a pair of brother's, fling on one of those butter-bowl hats, draw on a pair of leather gloves, and sally forth on a reconnoissance. Rake off the mulches and let the sun have a shine at the tender crowns which are just ready to break through the brown husk and show their emerald lances. Make up your minds what to plant and where to plant it; put in a few seeds of early cabbage and peas, in a warm nook, and make up your minds to follow out such a good beginning, every day or so through the season."

SCHOOLEY'S PATENT ICEBERG REFRIGERATOR.



Schooley's upright formed refrigerator, an accurate cut of which we present above, contains every improvement covered by all the patents issued to Schooley, Winship and Fairbanks, up to the year 1863. The ice chamber in this refrigerator is placed at the top of one side, and not across the top, as in those formerly manufactured; this change being made to prevent any moisture from collecting on the bottom of the ice floor in the preserving chamber. The door to the ice chamber opens from the front and not from the top, as in all other styles, making it more convenient to put in or get at the ice.

The following is what Professor Nathaniel Hill, Professor of Chemistry at Brown University, says of Schooley's Refrigerator:

"In the month of August I experimented with Schooley's Refrigerator, also with several other kinds, in all of which I placed a dish of onions, some milk, and custard pie. The refrigerators were then closed, locked, and sealed, and not opened for twenty-four hours. Upon examination, ALL OF THEM BUT SCHOOLEY'S were highly charged with the odor of onions, and the milk and pie were strongly contaminated with the taste of onions. The inside linings were dripping with water, and the entire atmosphere was saturated with vapor, and the milk had become sour. In the Schooley Refrigerator the linings in the Provision Apartment were dry and the atmosphere pure. There was no accumulated odor of onions. In the milk and pie no taste whatever of onions could be detected. The milk was perfectly sweet."

This refrigerator is sold by Curtis & Cobb, seedsmen and florists, of this city.

TEACHING A COLT TO BACK.—A correspondent of the *Rural New Yorker* gives the following directions:

We should hitch him up to a cart or wagon that stood on an elevation, with a gradual slope one way, so that the cart or wagon would run back itself, and try to back him until successful; then try on level ground; and then a small load. Thus by degrees you can succeed in teaching him to back nearly as much as he could draw.

AN AGRICULTURAL COLLEGE.

The attention of the reader is called to an article on another page, upon the subject of founding an *agricultural college* in this State, under certain conditions imposed by Congress. These conditions are in an act "donating public lands to the several States and territories which may provide colleges for the benefit of agriculture and the *mechanic arts*." The common opinion entertained is, that this grant contemplates only to benefit *agricultural* pursuits,—but the following extract from the act, Section 4, will show that this idea is entirely erroneous. The land granted is to be sold *at the expense of the State*, the receipts to be invested in stocks yielding not less than five per centum upon their par value, and they must constitute a perpetual fund, the capital of which shall remain forever undiminished, "and *the interest* of which shall be inviolably appropriated to the endowment, support and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to *agriculture* and the *mechanic arts*." This, the reader will observe, is not in consonance with the common opinion in regard to the matter.

Another point to be considered is, that no portion of the money received from the sale of the lands can be paid for the construction of buildings; whatever *they* may cost must be furnished by the State or by individuals. Any State availing itself of the benefit of the act *must* provide not less than one college *within five years*, or the grant will cease, and the State is *bound to pay the United States* the amount received for any lands that may have been sold.

This whole subject has been before the Legislature.

In the report of the Committee, to whom the matter was referred, they state that Massachusetts has twelve Senators and Representatives, which entitles the State to land scrip for 360,000 acres of land. The course which they recommend to be pursued we regard as the safest one, and if adopted, and energetic measures are at once instituted to sell the land, will be quite likely to remove something of the prejudice now entertained against the whole scheme. They recommend "to receive the land scrip, and dispose of it as rapidly as possible on good terms, and ascertain precisely what the fund will amount to, before any large expenditures are authorized. And even when it shall have been all collected and funded, it should be so employed as, like the school fund, to induce the liberal expenditure of money from other sources, so as by combination with that, to produce the greatest possible benefit." The report goes on to say:

> The object is not, as many seem to imagine, solely to promote *agriculture*. "Agriculture," though mentioned first, has no pre-eminence in the law over "the mechanic arts." The terms "agriculture and the mechanic arts," were evidently chosen to represent *all forms of industry*, which, by handicraft and the use of machinery, contribute to the sustenance and comfort of man. And the primary design of this donation was not directly to promote even these forms of industry. It was to aid the States to sustain *colleges* or schools, in which that *science* should be taught on which all the industrial arts depends, without excluding any science because its immediate practical benefit might not be seen, and not neglecting military tactics.

Whatever agencies may be established that will judiciously aid in instructing our people, of every class, we shall hail with real satisfaction, and shall improve every opportunity to co-operate with such agency, and contribute whatever we can to its success. We are free to confess that, upon a more careful perusal of the act, the reading of the report of the Legislative committee, and that of a committee of merchants of Boston interested in the scheme, we look upon it with favor, and wish it distinguished success. It will require, however, on the part of the State authorities, great energy, discernment and precision—to secure the objects sought without embarrassment and loss to the State. The report continues:

> There can but one serious impediment in the way of making a true professional agricultural school in this State prosper, and that is a want of interest in it among the agricultural population. An experimental farm may be obtained, model buildings can be erected, accomplished professors and lecturers can be employed, all that is known about the science of this branch of industry, which, though no more essential than many other occupations, yet does support all other industry, can be explained and illustratated; and the young man who intends to be a farmer can be enabled to learn, in a few months, far more than he could obtain by a whole lifetime of labor and thought, if dependent alone on himself. The re-ources of thought of all ages and countries can be poured at his feet. That any can ridicule, or oppose, or undervalue such an institution, is one of the strongest reasons why it should be established. They are not yet sufficiently enlightened to know their own wants.

The last sentence of this quotation is significant. "*They* [the farmers] *are not yet sufficiently enlightened to know their own wants.* How they shall obtain this light, is the great question in issue. If the college were thoroughly established, to-day, so far as farmers are concerned, it would be of comparatively little advantage. Few qualified to enter it could be found. It would be too high up, beyond their reach. They must begin lower, and ascend *in the natural way*. That way, to our mind, is clear, available, and certain in its results. We have seen it demonstrated. It can be again and again, at little cost, and will arouse that want of interes' which, the committee's report says, is the "one serious impediment in the way of making a true professional agricultural school prosper in this State."

Let us see. The Legislature appropriates some $25,000 or $30,000, annually, to the various county societies to aid in promoting the interests

of agriculture. Some of these societies have been established more than half a century, and others for varying periods, down to within two or three years. The leading things these societies did last year, they did the first year of their existence, and have done every year since. Some improvements have been introduced, and some grave errors, until their general operations swallow up the liberal appropriations of the State—and as much more from individuals—without producing beneficial results at all commensurate with the money expended. The same things have been done, and paid for, over and over again, until the object sought is, to *gain the premium*, rather than to benefit the public by submitting important and well authenticated results in the breeding of animals, or the production of field crops. In fact, the salt has lost its savor. The whole thing needs remodeling, or the State bounty should be discontinued.

In this connection, we are glad to notice that one of the members of the *State Board of Agriculture*, entertains similar views. In his report of the society to which he was a delegate last fall, he says:

"The exhibitions have come to be considered too much as a mere matter of course, the forms of which are to be gone through with, and a certain amount of money distributed in premiums, quite a proportion of which really goes for accidental products, for which the competitor is entitled to little, or no credit.

"After a few years," he continues, "the interest abates, and finally there comes to be mainly a scramble among the competitors for the money distributed in premiums. The reports of committees grow less and less interesting and suggestive, and at last, all that is expected, even of a committee, is the bare announcement of the premiums awarded, without comment, and are of little or no use to anybody except the recipients."

This is plain language, is as truthful as plain, and we thank the gentleman for his bold utterance. It should secure the earnest attention of the Board to this important matter.

It is worse than useless to continue the old practices any longer. They not only do no good, but have corrupting influences, which are paid for by taxes laid upon the people. Let them be arrested at once, and some new modes introduced. As it is easier to pull down, than to raise up, we will suggest a plan for progression.

The one great thing in the way, as suggested by the Legislative committee and the member of the Board of Agriculture whom we have quoted, is *the want of interest*. They are right. How can this be secured? It is only a comparatively small portion of the people of any county—even among the farmers—who take a decided interest and participate in the affairs of the county society. This interest can be awakened and sustained at small cost. Let a society receiving $600 bounty, appropriate one-third of that amount, annually, in holding meetings in each town in the county, or at least, in the leading agricultural towns. Sound, practical men should be selected to attend these meetings and orally address them—and what is still more important, they should possess the genius to induce their hearers frequently to *address each other*. These speakers themselves should have an experimental knowledge of farm operations, should be genial and affable persons, and have that peculiar tact to "draw all to them," which some so eminently possess. The meetings should have something of the character of our Teachers' Institutes. They should be formally announced, and the leading minds in the locality especially called upon to aid in fully securing the objects of the plan. An hour's lecture will not do—the entire day and evening should be occupied—the subjects to be discussed announced beforehand, and the exercises conducted systematically. No single flint produces fire. Few isolated farmers progress, but a contact like this will make the sparks of thought fly. These meetings must not be confined to men—their wives and children must be there also.

Briefly, these are our views in this matter. They have been put in practice in another State, with the most satisfactory results. One winter's labor of this kind will secure the interest that now lies dormant, and accomplish more good than all the societies have accomplished for the last five years. When the pioneer work is done, there will be multitudes ready to listen to the chemist and philosopher, and after them to enter the *agricultural college*.

For the New England Farmer.

WOOL GROWING.

Professor Owen defines wool to be "a peculiar modification of hair, characterised by fine transverse or oblique lines, from two to four thousand in the extent of an inch—indicative of a minutely imbricated scaly surface, when viewed under the microscope; on which, and on its curved or twisted form, depends its remarkable felting property, and its consequent value to manufacturers."

The professor is mistaken in estimating the value of wool for general manufacturing purposes as dependent on the "imbricated scaly surface" of the fibre, and the number of "fine transverse or oblique lines, in the extent of an inch. "Both of these principles greatly add to the value of wool for *fulling* and *felting;* but these are not the most valuable properties of wool, neither are they the most common, nor are they produced alike in but few cases of fleeces. Many fibres of wool, even fine and silky, have but little of the barbed principle, consequently they will full and felt but poorly, and they are the more valuable for that, particularly where the garments made are often washed. These barbs or scales will vary on the same sheep in different years, and at different periods of the same year, by the treatment and food of

the sheep. There is also an unevenness and irregularity about the length of the scales, according to the food, the exercise and health of the sheep, as also a difference of the condition of the "yolk" or greasy substance surrounding and pervading the interior of the fibres of the wool, which affect the fineness and coarseness of the fibre, and its adaptability to secure and receive color. All these differences affect the value of the wool to the manufacturer, as well as help deceive him in the purchase of wool. The shrinkage of wool is the bane of the manufacturer; no two fleeces shrink alike, and the mistakes made in selections of wool, from not being able to determine these differences in its condition, have ruined more woolen manufacturers in New England than all other causes combined. Even the best and most skilful woolen manufacturers have never been able to calculate, with any certainty, the real cost of goods beforehand, from the fact that they could seldom rely on an average shrinkage on wool which could be estimated by samples. These difficulties can be better understood by the farmer than the manufacturer, and he can do more towards remedying the evil. The proper care of the sheep will produce good fleeces and of uniform quality of wool. Few people get the true value of the sheep's product, or rather what might be the product, for want of proper care.

A distinguished gentleman told me a few days since, that while visiting a brother who had a large flock of sheep in New Hampshire, he was told that a widow lady in the neighborhood had a flock of but half the size of his brother's, and of the same kind of sheep, from which she got as much wool as came from his brother's whole flock, and that his brother frankly admitted that the reason was the widow tended her sheep better, and thus got more wool and lambs than he did. Now this principle is undoubtedly correct. Be kind to your sheep and teach them never to fear you, but on the contrary to follow you, as do the sheep in Spain when on their long marches. See, in winter, that they have proper housings, proper food and water, and proper exercise; the latter principle being applicable to all stock on the farm. Sheep, more than most any other domestic animals, have a confiding nature, and like attention; are affectionate and are always happier and more contented when in sight of the flock tender. A little attention in this respect, even in New England, will promote the growth of sheep. Again, dogs, unless especially trained with sheep, should be kept from them. In the western part of Massachusetts, it has been said that dogs killed more sheep than the butchers. In such cases, slaughter the dogs, and let the sheep live in peace.

The profession of the farmer is undoubtedly the highest of all professions, and that of the shepherd is next. We need not fear the influence of either. David of old was a shepherd boy, and after he ascended the throne, he still kept up an interest in pastoral life, and had numerous flocks and herds. His devotional thoughts partook much of pastoral life. "The Lord is my shepherd; I shall not want. He maketh me to lie down in green pastures. He leadeth me beside the still waters." "Be thou diligent," says Solomon, "to know the state of thy flocks, and look well to thy herds. The lambs are thy clothing, and the goats are the price of thy field, and thou shalt have goat's milk enough for thy food, for the food of thy household, and for the maintenance of thy maidens."

We may honor the profession of sheep-raising and wool-growing; yea, we may also be proud of the manufacture of wool; nothing has been accomplished by the American farmer, or his wife, more favorable to his New England character than that of the domestic manufacture of wool and flax. When the mothers and sisters carded, spun and wove their wool and flax for domestic use, a work was accomplished greater than the saving of so much money. The labor was great, but the education gained was substantial. Such experience made hardy mothers, useful and accomplished daughters; fit, even, for all the higher accomplishments of refined life, and no way inconsistent with them. Said an old lady to me, a few years since, "I used to rise in the morning early enough to get my breakfast, dress the children and get my work done by daylight, so as to commence weaving as soon as I could see the thread in the shuttle." Such were the pioneer mothers of New England, who valued and honored sheep-raising, wool-growing and manufacturing, and their memory will be with us and in our history, as long as the virtues of our people shall find a record in the English language.

S. M. A.

For the New England Farmer.

LISTENER AT THE STATE HOUSE.---No. 2.

At the first of these series of meetings, when the subject was *Agricultural Education*, Mr. GEORGE B. EMERSON opened the discussion, and highly extolled that part of the Governor's address which referred to the establishment of an agricultural college, on the basis of the grant of land from Congress. This gentleman, as well as other speakers, seemed to think that the proposed college was to be a purely agricultural college; whereas, according to the grant, "*military tactics*," and such branches of learning as are related to the "mechanic arts," are to stand prominent in such an institution. The words of the Act are: "Where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such a manner as the Legislature may prescribe."

It would seem, then, from this, that the teaching of agriculture could only be a small portion of the labor for this college to engage in. If the general principles of this are taught, so must also be those of the other studies named; and if the young farmer is to be finished off to perfection in this institution, then it is only fair that the mechanic should be so also. Besides agriculture, military tactics are to be taught, and a young man must be shown how to make a locomotive, a watch, a wheelbarrow, a copper kettle, &c. To do this to any useful extent, the institution must necessarily be *very large*; and if well patronized, there is some danger of its monopolizing the business of teaching in *all* trades. Who would learn a trade anywhere else, all other things being equal? But they cannot be equal; for a mechanic's apprentice could otherwheres more than earn his livelihood while acquiring a knowledge of his business. There might be some question, then, whether any one would patronize such a *shop* or school for the "mechanic arts." And for the same reason, there

exists an equal doubt whether the young farmer could *afford* to attend it, even if its tuition were free! Certainly, its teachings must be very far beyond anything on our ordinary, practical farms, to expect much encouragement.

But, perhaps only general principles are to be given. Very well. Here is a young man who wishes to become a machinist. He is urged to attend this college, and here he is instructed in the rudiments of his intended calling, perhaps with some doubtful collateral branches. He spends three or four years here, paying his board at least, though earning nothing. When he graduates he is not a machinist, and if he intends to become one, he has only to go and learn the details and practice of the business! So with the intended farmer, the carpenter, &c.

Mr. Emerson is a retired teacher, not a farmer. A farmer is a man who gets his living (or attempts to) by tilling the soil. The ideas of Mr. E. are on a grand scale, and he means well for the farmer and the State. Like most scholars and scientific men, he seems to think that everything must be scholastically taught, and every man put through some great institution of learning to be worth anything—seeming to forget how worthless, in the great battle of life, many are who are thus pressed through, even with ordinary honors. Although more than fifty per cent., probably, of the money expended in education is lost, still, on the right person it is effective; and although we cannot raise wheat without chaff, we think that if these gentlemen would make practical farmers, they must give them less of the odor of "learned professors" and more of that of the soil. Some teachers are such enthusiasts in education—have so scientific a way of doing simple things—that they deserve to be "showed up" by Dickens in his best style. Like Mrs. Jellyby, they have a "mission;" and this would seem to be to teach simple rustics how to saw and split wood, pump, turn a grindstone, pitch hay, or shovel manure! True, there is a best way of doing these things; but every man's own faculty is his best and ready instructor. True is it, also,

"That those who think must govern those who toil."

Yet it would be a painful state of affairs, if persons could know nothing save that which some experienced teacher forced by rule into them. Intuition is the first and most general instructor, though without much reputation.

In the matter of agricultural education, for the past few years its friends have sought to get the power from the Legislature to introduce some good manual upon the subject into our common schools. They said they did not want a college, for that would only make sublimated "gentlemen farmers." Its rudiments, they said, should be taught in the district school, so that every young lad desiring to become a farmer could study the subject in his own neighborhood, and without extra expense. *That power has now been granted by the Legislature*, and placed in the hands of the various school committees of the towns. I have not, however, heard of a single pupil who has commenced the study. Indeed, in the rural districts there is great apathy on the subject. The farmers of the State did not petition for the power, and it is to be apprehended that they will not avail themselves of its privileges.

Now that Congress has made a grant of land to endow an industrial school in each State, our excellent Governor has recommended the renewed consideration of the subject of agricultural education, and hopes the State will avail itself of the grant. Yet the working farmers seem to feel no interest in the matter; they recognize no want that the school can supply, whatever their wants may be. It will not give them capital or manure, nor can it command the keys of the heavens, or master the subjects of meteorology and electricity, to whose mercy farmers are so subjected. Are there important experiments made in the art, they know them in a few months from every part of the civilized globe. Would a college be likely to add anything new or valuable? And wherever situated, would its experiments in raising crops be uniform each year, or valuable in other localities? Would not each graduate, when he came to his farm, be obliged to elucidate new principles suited to that farm itself? If so, he would have spent his time and money for nothing.

There will be so many calls for the public money hereafter, that we should be careful that none is spent which is not absolutely necessary. Hence I submit that this grant (could it be so used,) would be much better employed in paying the public debt, or endowing an asylum for the care and support of maimed soldiers, than in attempting to teach what is well known in agriculture, or in multiplying theories, of which we have too many already.

In this contemplated college, the superintendence of the management of fertilizers and the raising of crops, would probably be in the hands of the Professor of Chemistry, instead of some sunburnt farmer of years of practical experience. Hear what Prof. VOELCKER lately said before the Royal Agricultural Society of England. This gentleman is himself Professor of Chemistry in the Cirencester Agricultural College: "Chemistry should never be made the direct guide to the agriculturist. Science is, after all, only the systematic arrangement of well-authenticated facts, and the rising generation should be taught its general principles. But many professors of chemistry have overestimated their own powers, and instead of explaining the experience of practical men, they set themselves up as guides to the farmers; they have overestimated the powers of the new science, and in consequence stumbled."

In Great Britain, agricultural schools are the appendages of the landed aristocracy. Owing to the wealth and exalted position of the owners of the soil there, agriculture is more fashionable, and more systematic, perhaps, than here; and although in America we do not farm it so highly, no one can say—while we feed ourselves and assist in supplying with food half the civilized world, besides giving Europe as many hints as she does us—that our agriculture is a failure. It subserves its purpose, and always will, whether or not we have the doubtful aid of agricultural colleges. Compare the condition of the rural population of England and the Continent with our own, and then ask whether we need the influence of their institutions, or they of ours!

If we had a public fund, whereby we could institute a series of experiments in the raising of crops, it might be desirable. Our farmers, however, are now annually making various trials in the application of manures, under the direction

of the Board of Agriculture, or otherwise, and their results are presented to the farmer so that he can read them with little or no expense at his own fireside. Without giving our opinion on the value of these experiments, would an agricultural college, in this department, accomplish more?

A few years back, the Board of Agriculture had charge of the farm at the State Reform School, at Westboro'. Here a great variety of experiments were made in almost everything pertaining to the farm; but that they were of any great value does not seem to be conceded. At any rate, they are rarely alluded to. They found the soil, manures, or the seasons, or all of them—as might have been anticipated—exceedingly capricious. On that spot they may have had more value than anywhere else.

It must be admitted, we think, that agriculture is yet a tentative, or experimental science, in spite of the researches of chemistry and the urgent wants of the farmer. And in the nature of things, how can it ever be otherwise? Light, heat and moisture are so essential to maximum crops, that no farmer feels sure of the latter, however well he has fulfilled *his* conditions. And the laws of meteorology are so various and so local, that it must be presumption to think of discovering them; and if known, we should not be able to meet them. A few general principles only seem to be of real value in agriculture, and among these are, the proper pulverization of the soil, a good supply of manure, and the eradication of weeds.

In regard to the proposed college, one fact is worthy of note, and that is the diversity of opinion of its friends in its fundamental organization. Mr. Emerson said it should not teach what is taught in any other school. Perhaps this would excite their jealousy. But how can it teach what it is required in the Act without infringing upon other institutions? The Governor recommends ten professorships, and would be glad to add more. This difference of opinion is very natural where its friends are ignorant of what the farmers really want and what they would patronize. Mr. Emerson said it ought to have a professor of Forestry, of Fish Culture, of Comparative Anatomy, (!) of Entomology, and of Agricultural Chemistry. But would he exclude Botany and Geology, because they are taught in other institutions?

Gov. Andrew alludes favorably in his Address to the Bussey Institution, (yet in embryo,) and to the Institute of Technology, which Mr. Emerson says is a sure thing, while the Governor hopes it will be. The first of these is for the benefit of the farmer, but the other is designed to instruct *everybody*. This Institute has an organization of learned, wealthy and public spirited men; it has a small room with a few models and minerals in it in Summer Street, Boston. It has had many preliminary meetings, and has issued circulars setting forth its *very extensive* objects. Thus far, it would seem, its operations (and perhaps for a good reason) have been confined to paper. But can it ever accomplish much with the unlimited range it takes, embracing everything in the arts and sciences, agriculture, commerce, political economy, &c.? If every member had the heads and hands of Briareus, we think it must fail. While it aims to teach everything to everybody, will it not founder by really teaching *nothing* to *anybody*? Should it have a museum, it may be worth looking at, although not very necessary, as all these wants are now well supplied—the farmers, certainly, having one at the State House. These great, *universal* institutions of learning—inflated, too often, with pride and pretence—savor not a little of quackery, and bring to one's mind some astounding "universal medicine." Aiming at too much, they generally fail to satisfy the public; whereas, by having a more confined and specific purpose, they might be worthy of appreciation. Look at the Smithsonian Institute at Washington. Has this been satisfactory in its operations and results?

This calls to mind the national Military School at West Point, which has a *definite object*, and must be regarded as a success; for the art of killing men is now the best and most honorable business! But why a military department should be provided for in the national Act endowing industrial colleges, can only be accounted for by the belligerent attitude and patriotism of Congress at the time of its passage.

Granting the importance of military schools, it does not logically follow that agricultural schools must be so. A farmer sends his son away to learn the art of war, because he has no means to teach him at home; and so of law, medicine and theology. And if he wishes his son to become a machinist, he puts him in a machinist's shop; but if he wants him to learn farming, he keeps him at home, where he should be, on the farm. What West Point is to the one, this is to the other. I do not understand that the proposed college is primarily intended to make *learned men*, but simply model farmers. The highest state of knowledge, however, in this matter, will not make many young men such; you must add capital, the means to carry out the perfected ideas.

A few years ago, an experienced farmer, a member of the Board of Agriculture, said at the State House, that he opposed a college "because we had no agriculture to teach." We have got, however, as much as other nations; but what we have got, is best learned in the field. Some suppose that a college would elevate husbandry by exciting the interest of rich men's sons. I have an instance in point. A wealthy young man, a graduate of the Lawrence Scientific school, with much enthusiasm, got his father to purchase him a farm near Boston, where he had a chemical laboratory erected to aid him in his field operations! Last year I inquired of his progress, when lo! the whole thing had blighted! Some suppose a college would supply well educated, *superintending* farmers. But have we sufficiently large estates among us to make this encouraging? Our New England land-owners usually oversee their own estates, and they might be not a little jealous of a college-educated farmer in buckram. An imporant branch of farm husbandry is the *marketing* department. This would not probably be well learned at an agricultural college, though it might have large fields for experimenting purposes.

Can the State, at present, afford to advance the funds for the lands for this institution, and erect the buildings at its own expense, as required? And how long must it wait for the government realization? Who shall control it, theoretical or practical men? These questions are now agitat-

ing its friends, and it is to be feared, if organized, it will be an apple of discord among learned professors and influential politicians, while an object of merriment to the practical farmer.

Oak Cliff Cottage. HORTUS.

For the New England Farmer.

STRAWBERRY CULTURE.

MR. EDITOR:—As the season for making strawberry beds approaches, perhaps a few suggestions on the subject may be of service to some of your readers. The selection and preparation of the soil is the first thing to be attended to. A deep gravelly, or sandy loam is considered best, though the strawberry may be grown on almost any soil that is not too wet. The best manures are decomposed vegetable matters composted with wood ashes, lime and salt, at the rate of 30 bushels ashes, 12 bush. of lime, and 3 bush. of salt to the acre. The manure should be thoroughly mixed with the soil before the plants are set. Carefully conducted experiments have led cultivators to reject animal manures as too heating, if used on soils naturally warm. Pardee relates that his first successful experiment with the strawberry was on new land, which gave an enormous crop of fruit. In order to get a still larger crop the next year, he forked in rich manure between the rows, and gave them the best of care, and obtained monstrous vines and blossoms, but no fruit. He then trenched a bed three feet deep, made it rich, and set out other plants. The result was the same—large vines, but no fruit. He removed a large part of the rich soil, and replaced it with sand, and the bed bore an abundance of the largest berries the next season. The ripening of the crop may be hastened by the protection of a fence or hedge on the cold side, or by making the bed on a southern slope; or retarded, on a northern slope. They will grow in shade, but sunshine improves the flavor of the berries.

Soon after the first of May is the best time to transplant, if the ground is in good working order, and the sun not too hot. The soil should be finely pulverized by repeated plowing and harrowing. The rows should be marked off four feet apart. The plants should be taken up carefully with a trowel, and be set as soon as possible, neither allowed to dry, nor to remain long in a large mass, for fear of heating. If they are brought from a distance, so as necessarily to shake off all the dirt from the roots, they should be dipped in thick muddy water before setting. The plants are usually set from eight to twelve inches apart in the row. This should be regulated by the quality of the soil, and by the character of the plants. Where the soil is rich, or if the plants are free runners, the longest distance is preferable; and, if both these conditions come together, a still greater distance would be advisable. The beds must be kept clean, by the hoe and hand weeding on small beds, or by the horse hoe on larger fields. The full crop is not expected till the next year. When the runners begin to appear, it is well to guide them so as to fill up all the space you wish covered, and if they threaten to set too thickly, the runners may be pinched off. The plants should have room to grow, and not be allowed to stand nearer than eight or ten inches apart. Some leave a path open, for convenience in picking, about eighteen inches in width; others only twelve inches. In garden culture, or when it is convenient to keep the bed in the same place for a series of years, the rows are sometimes set six feet apart, and the runners allowed to cover one-half the ground, while the other half is kept open till the vines have fruited, when they are allowed to fill the open space, and the first bed is dug up and kept open; and so alternating as long as it is found desirable, always dressing the open space with suitable manure, and keeping it well tilled. But where there is plenty of suitable land, cultivators have adopted the practice of making a new bed every year, taking off but one crop, and then plowing up the old bed. This is considered the most economical method, as it is very difficult to keep an old bed free from weeds, and from becoming too crowded by the setting of new plants by the runners.

It is customary to protect the beds by a light covering of straw in the winter, to keep the plants from being lifted out of the ground by the frost. Some use a coarse swamp hay; and a friend of mine in Belmont prefers sedge from the salt marsh, because it is not so likely to blow away. Mr. Pardee strongly recommends mulching with tan bark, sawdust or green rowen, over the whole ground, immediately after the setting of the plants. If sawdust is used, it should be spread thinly, or there will be danger of mildew.

My Belmont friend, mentioned above, whose soil is a strong clayey loam, practices after the following manner. He manures lightly with a compost of horse manure, ploughing it in at the rate of from six to eight cords per acre, (has put on fifteen cords;) ploughs and harrows repeatedly till the soil is as fine as an onion bed. As a market fruit, he prefers Hovey's Seedling, and the Brighton Pine. Sets in May, in rows four or five feet apart, twelve or eighteen inches apart in the row, according to the quality of the soil. One row of Brighton Pine, a staminate variety, to six of Hovey's Seedling, a pistillate variety; taking care not to let them intermingle their runners. While the runners are setting, he goes over the field two or three times to fasten those that may be blown about by the wind. Keeps the bed clear of weeds the first year. Protects in the winter by a mulch of swamp hay or salt sedge, spread on lightly. In the spring he rakes this off, and cleans out all weeds that may have escaped his care the preceding summer. Paths are spaded between the beds wide enough to pass through and pick the fruit. Nothing more is done to the bed, but when the fruit is off, it is ploughed up for other crops.

I will not attempt, Mr. Editor, to name the best sorts. There are many varieties, most of them good, and each esteemed best by somebody. I pretend to no special infallibility either of taste or judgment, and leave the reader to select for himself, only entreating him to select some sort, and give it a fair chance, and if he does not find it an investment that pays well, in smiles and pleasant feelings among wife and children, (if he is blessed with such treasures,) then he may set me down for a false prophet. M. P.

Concord, April 6, 1863.

☞ The underground railway (Metropolitan) in London, is a success. It was opened a few weeks ago, and its average number of passengers per week is a quarter of a million.

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CATTLE MARKETS FOR APRIL.

The following is a summary of the reports for the four weeks ending April 16, 1863:

NUMBER AT MARKET.

	Cattle.	*Sheep.*	*Shotes.*	*Fat Hogs.*	*Veals.*
March 26.....	1565	3226	225	—	150
April 1.....	1612	3115	350	—	300
" 9.....	1041	3201	1200	—	400
" 16.....	1250	1726	1000	400	600
Total.....	5468	11,268	2775	400	1450

The following table exhibits the number of cattle and sheep from each State for the last four weeks, and for the corresponding four weeks last year; also the total number for the first sixteen weeks of each year:

	THIS YEAR.		LAST YEAR.	
	Cattle.	*Sheep.*	*Cattle.*	*Sheep.*
Maine	347	—	481	—
New Hampshire	663	3140	350	2018
Vermont	1283	4872	834	6398
Massachusetts	518	1643	603	1838
Northern New York	29	280	100	—
Canada	46	175		
Western States	2582	1140	2406	250
Total, last four weeks,	5,468	11,268	4,774	10,504
Total, since Jan. 1, (16 w'ks,)	23,762	44,515	19,599	43,652

PRICES.

	Mar. 26.	*Apr. 1.*	*Apr. 9.*	*Apr. 16.*
Beef, 1st, 2d & 3d qual.....	6½@8½	6½@8½	7 @9	7½@9
" a few extra.....	8½@9½	8½@9	9½@9½	9½@9½
Sheep and lambs, ℔ lb.....	8½@9½	8½@9½	7 @9	7 @9
Swine, stores, wh'sale.....	5 @6	5½@6½	5 @6	5 @6
" " retail.....	5½@7½	6½@7½	5½@7	6 @7
Hides, ℔ lb.....	8 @8½	8 @8½	8 @8½	7½@8½
Pelts, each,.....	$4 @4½	$4 @4½	$3½@3½	$3 @3½
Tallow, ℔ lb.....	8½@9	8½@9	8 @8½	8 @8½

REMARKS.—The change in prices of cattle and sheep has been greater during the past four weeks than during any equal number of weeks for the last year, if not for several years. For the first week, we reported an advance of about ½c ℔ lb. on beef; a gain that was lost the next week; and yet prices are 75c ℔ cwt. higher at the close of the month than at its commencement. A few of the very choicest extra and premiums are sold at 10c ℔ lb., and very little beef fit to eat has cost less than 8c ℔ lb., for the last two weeks.

Hides and tallow have also declined in price, and calf skins may be reported as dull. During the fall and winter the butchers have been able to sell the hide and tallow for more ℔ lb. than they paid on the dressed weight of their cattle; but for the last month they have generally paid more ℔ lb. for the best cattle than their hide and tallow are worth in market,—a change of no little consequence to the butcher.

Sheep reached the highest point on the scale of prices, the first week of the term, when a few lots sold for 10c ℔ lb. Since then prices have declined from one to two cents ℔ lb. on the live weight; in consequence chiefly of pelts falling in value about one dollar and fifty cents each.

Some of the butchers argue that there is little probability that sheep will command much higher prices than those paid the past two weeks. They say that the country is full of sheep, and that, in consequence of the high prices of wool, farmers would not sell until after shearing, when there will be large numbers of sheep thrown upon the market. Especially is this true, they say, of the Western States. We notice by the report of the New York market, for April 14th, that sheep were quoted at from 9½ to 10c, with a lively market, which does not look much like verifying the foregoing prediction.

For several months past the Vermont Central stock cars have reached the market by way of the Fitchburg, instead of the Lowell Railroad. This change has excited a spirit of competition between the two routes, so that the stock on both routes has arrived at Cambridge early Tuesday morning. Although there is nominally no change in the market day, there is practically a radical change in the time of business. At present, the trade at Cambridge is mostly done Tuesday forenoon. After dinner a part of the drovers who have any stock unsold start at once for Brighton, while others remain an hour or two, and then start for Brighton, or put up their stock in Cambridge. For several weeks there has been no market at Cambridge on Wednesday. At Brighton most of the Western cattle are sold Tuesday; although cattle are also sold there on Wednesday and Thursday,—the latter being the great day for the retail trade in working oxen, milch cows, goats, old horses, carts and wagons.

Sales of Cattle and Sheep.

The following is from our report of sales, April 16:

Geo. W. Jones offered for sale this week some very rich Durham grade bullocks; one pair four-years old last fall, fed by Keitt Brothers, Deerfield, Mass., received the first premium offered by the Franklin County Agricultural Society, for beef cattle, and weighed 4500 lbs. at home. These oxen were not only well fatted, but uncommonly well built up. Altogether, they were a beautiful, finely-shaped pair. Another pair, fed by A. & E. Andrews, of Shelburne, weighed 4800 lbs. at home, and were fit companions of the premium steers, although somewhat older. Saunders & Hartwell took these bullocks at 10c ℔ lb. Mr. Jones sold 5 other grand good oxen, laid at 1250 lbs. each, at 9½c, and 8 laid 1100 lbs., 9c.

Mann, Thayer & Leathers sold to O. Lynde 2 oxen fed by C. W. Bragg, Warren, Vt., laid at 2200 lbs., for $200.

Hosea Gray sold just 1 pair of oxen to N. & S. Jackson at 9c ℔ lb. His other stock fit for beef was sold by dollars at rates varying from that price down to 7c ℔ lb.

E. W. Baker sold 2 oxen to Mr. Jewett, 2443 lbs., for 7½c, 37 sk.; 2 weighing 3050 lbs., for 7½c, 36 sk.; 4 weighing 2700 lbs. ℔ pair, for 8c, ½ sk.; 2 weighing 2650 lbs., for 8½c, ½ sk.; 2 to A. G. Carter, weighing 3000 lbs., for 8c, ½ sk.; 1 cow, laid at 500 lbs., for $30.

D. A. Philbrick had two pairs of oxen this week laid at 1100 lbs. each, which he said were such as farmers in his section believe to be good enough for any market, and equal to those reported in Brighton at the highest figures. After waiting all the forenoon for the butchers to come forward with their "10c, 28 sk.," Mr. Philbrick was glad to receive from J. F. Taylor, a proposition to kill and weigh the oxen, allowing 9c ℔ lb. for three, and 8c for one; and giving the owner the privilege of trying as hard as he could for half a day longer to better the bid. And he did try, but without finding any one who would make as liberal an offer as that of Mr. Taylor, who consequently took the oxen. He also sold to E. O. Soles a pair of oxen, laid at 1650 lbs., for $131, and a pair laid at 1900 lbs., to Mr. Dearborn for $164.

Sabin & Clark sold their flock of 203 clipped sheep, averaging 90 lbs. each, for 4¾c ℔ lb.; saw another lot of sheared sheep sold at the same price, and a lot of unclipped at 7¼c; H. Thayer sold a good lot of 44 River-fed sheep, averaging 100 lbs. each, for 8c ℔ lb.; O. L. Miner sold 30 of his drove, weighing 100 lbs. each, for 8½c; E. W. Baker sold to J. W. Hollis 10 selected cossets, weighing at Cambridge 1370 lbs., or 137 each, for 9½c ℔ lb.